

T

876
D18A3

UC-NRLF



5B 110 426

YC101232

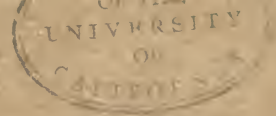
GIFT OF



EX LIBRIS

GPI
SEP 11 1916

S. B.



UNIVERSAL EXPOSITION 1915

CELEBRATING
THE OPENING OF THE
PANAMA CANAL

OFFICIAL CLASSIFICATION
OF
EXHIBIT DEPARTMENTS

PANAMA-PACIFIC INTERNATIONAL EXPOSITION
SAN FRANCISCO, U. S. A.
FEBRUARY 20 TO DECEMBER 4
1915

AUGUST, 1913

T876
IIA3

OFFICIAL CLASSIFICATION OF
EXHIBIT DEPARTMENTS

OF THE

PANAMA-PACIFIC INTERNATIONAL EXPOSITION

TO BE HELD AT SAN FRANCISCO IN THE YEAR 1915

IN CELEBRATION OF THE COMPLETION OF THE
PANAMA CANAL

OPENING, FEBRUARY 20, 1915

CLOSING, DECEMBER 4, 1915

TABLE OF CONTENTS.

DEPARTMENT	CLASSES INCLUSIVE
A.....	FINE ARTS 1 to 7
B.....	EDUCATION 8 to 42
C.....	SOCIAL ECONOMY 43 to 94
D.....	LIBERAL ARTS 95 to 215
E.....	MANUFACTURES AND VARIED INDUSTRIES...216 to 448
F.....	MACHINERY449 to 512
G.....	TRANSPORTATION513 to 551
H.....	AGRICULTURE552 to 666
I.....	LIVE STOCK667 to 699
K.....	HORTICULTURE700 to 742
L.....	MINES AND METALLURGY743 to 800

U. S. GOVERNMENT
PRINTING OFFICE
WASHINGTON, D. C.

FINE ARTS

DEPARTMENT A

(Open to works of United States and Foreign Artists,
whether previously exhibited or not.)

GROUP 1

PAINTINGS AND DRAWINGS

- Class 1. Paintings on canvas, wood or metal, by all direct methods in oil, wax, tempera or other media; enamels; paintings on porcelain, faience and on various preparations, of purely pictorial intent; mural paintings in any media.
- Class 2. Paintings and drawings in water color, pastel, chalk, charcoal, pencil and other media, on any material. Miniatures on ivory or ivory substitutes.

GROUP 2

- Class 3. Etchings, engravings and block prints in one or more colors. Auto-lithographs with pencil, crayon or brush.

GROUP 3

SCULPTURE

- Class 4. Works in the round, high and low relief; busts, single figures and groups in marble, bronze or other metal; in terra cotta, plaster, wood, ivory, or other materials.
- Class 5. Models in plaster and terra cotta.
- Class 6. Medals, plaques, engravings on gems, cameos and intaglios.
- Class 7. Carvings in stone, wood, ivory or other materials.

GROUP 4

LOAN COLLECTION

Selections of especially interesting art works of various kinds, from institutions and private collections.

The following will not be admitted to the Fine Arts Department.

- 1.—Copies; works resulting from industrial-mechanical processes.
- 2.—Pictures, drawings or engravings not framed.
- 3.—Works of sculpture in unbaked clay, or any form of modeling wax.
- 4.—Architectural ornaments except such as may be included in Group 3.

EDUCATION

DEPARTMENT B

GROUP 5

ELEMENTARY EDUCATION

- Class 8. Kindergarten.
Class 9. Elementary grades.
Class 10. Training and certification of teachers.
Class 11. Continuation schools, including evening schools, vacation schools and schools for special training.
Class 12. Vocational education toward specific training and occupation.

Legislation, organization, general statistics.
School supervision and school management.
Buildings; plans, models; school hygiene.
Methods of instruction; results obtained.

GROUP 6

SECONDARY EDUCATION

- Class 13. High schools and academies, manual training schools, commercial high schools.
Class 14. Training and certification of teachers.

Legislation, organization, statistics.
Buildings: plans and models.
Supervision, management, methods of instruction, results obtained.

GROUP 7

HIGHER EDUCATION

- Class 15. College examination and inspection boards in relation to college entrance requirements.
Class 16. Colleges and universities.
Class 17. Scientific, technical and engineering schools and institutions.
Class 18. Professional schools.
Class 19. Libraries.
Class 20. Museums.

Legislation, organization, statistics.
Buildings: plans and models.
Curricula, regulations, methods, administration, investigations, etc.

GROUP 8

SPECIAL EDUCATION IN FINE ARTS

(Institutions for Teaching Drawing, Painting and Music.)

Class 21. Art schools and institutes.

Class 22. Schools and departments of music, conservatories of music.

Methods of instruction; results obtained.

Legislation, organization, general statistics.

GROUP 9

SPECIAL EDUCATION IN AGRICULTURE

Class 23. Agricultural education in the elementary and secondary schools.

Boys' and Girls' Agricultural Clubs.

Class 24. Agricultural colleges and departments, experiment stations, instruction in forestry; methods and results.

Curricula, experiments and investigations, results.

Methods of transportation and shipment.

Legislation, organization, general statistics.

Buildings: plans and models.

GROUP 10

SPECIAL EDUCATION IN COMMERCE AND INDUSTRY

Commercial Education

Class 25. Business and commercial schools, higher instruction in commerce.

GROUP 10-A

Industrial Education

Class 26. Industrial and trade schools, evening industrial schools.

Class 27. Education of the Indian.

Class 28. Education of the Negro.

GROUP 11

EDUCATION OF THE SUBNORMAL

Class 29. Education of defectives and delinquents.

Class 30. Institutions for the blind, publications for the blind.

Class 31. Institutions for the deaf and dumb.

Class 32. Institutions for the feeble-minded.

Class 33. Special schools for cripples.

Class 34. Open-air schools for tubercular children, etc.

Management, methods, courses of study, results.
Special appliances for instruction.
Legislation, organization, statistics.
Buildings: plans and models.

GROUP 12

SPECIAL FORMS OF EDUCATION, TEXT BOOKS, SCHOOL FURNITURE AND SCHOOL APPLIANCES

- Class 35. Summer schools.
- Class 36. Extension courses; popular lectures and people's institutes; correspondence schools.
- Class 37. Scientific institutions, societies and associations; scientific expeditions and investigations.
- Class 38. Educational publications, text books, etc.
- Class 39. School furniture, school appliances.

GROUP 13

PHYSICAL TRAINING OF THE CHILD AND ADULT

- Class 40. Lectures and conventions, physiology and hygiene of exercise, anthropometry, school games, school exercises, theory of physical training, etc.
- Class 41. Exhibits of work, photographs and plans of gymnasiums, fields, classes, teams, etc.
- Class 42. Exhibits of class work illustrative of school work, systems of gymnastics, etc.

SOCIAL ECONOMY

DEPARTMENT C

GROUP 14

AGENCIES FOR THE STUDY, INVESTIGATION AND BETTERMENT OF SOCIAL AND ECONOMIC CONDITIONS

- Class 43. Public bureaus, offices, commissions, etc.
- Class 44. Societies: humane, institutional, church and other. Private agencies, commercial organizations, museums, etc.
- Class 45. Economic and social reform associations, special educational agencies, literature, congresses.
- Class 46. Surveys and special community investigations.

GROUP 15

ECONOMIC RESOURCES AND ORGANIZATIONS

- Class 47. Physical resources and characteristics, location and organization of industrial enterprises, general industrial statistics. Governmental promotion of industry.
- Class 48. Conservation of national resources.

GROUP 16

DEMOGRAPHY, EUGENICS

- Class 49. Composition, characteristics and movement of population; statistical methods, machines and appliances employed.
- Class 50. Immigration.
- Class 51. Eugenics.

GROUP 17

HYGIENE

- Class 52. Vital statistics.
- Class 53. Growth and nutrition, food.
- Class 54. Hygiene of infancy and childhood.
- Class 55. Communicable diseases.
- Class 56. State and municipal hygiene, public-health work and health laboratories.
- Class 57. Care of the sick, nursing. Care of defectives. Life saving.
- Class 58. Industrial hygiene, occupational diseases.
- Class 59. Special hygiene: traffic and transportation, military, naval, tropic, mental, sex, dental.
- Class 60. Educational publicity.

GROUP 18

ALCOHOL, DRUGS AND TOBACCO

- Class 61. Physiological and other effects of alcohol, drugs and tobacco. Statistics of consumption and economic cost. Organized efforts for lessening intemperance and use of drugs and tobacco.
- Class 62. Legal regulation of trade in liquor, drugs and tobacco. Private and public management of liquor trade.

GROUP 19

LABOR

- Class 63. Regulation and inspection of factories, mines and other work. Woman and child labor.
- Class 64. Organization of employees. Organization of employers.
- Class 65. Systems of industrial remuneration. Wages and cost of living.
- Class 66. Industrial disputes and their settlement. Statistics of unemployment, treatment of unemployed.
- Class 67. Statistics of industrial accidents and means for prevention. Employers' liability. Workmen's compensation.
- Class 68. Welfare work.

GROUP 20

CO-OPERATIVE INSTITUTIONS

- Class 69. Co-operative societies for production and distribution.
- Class 70. Co-operative credit and banking institutions, rural credit systems.
- Class 71. Co-operative building societies.
- Class 72. Co-operative agricultural societies.

GROUP 21

BANKS AND PROVIDENT INSTITUTIONS

- Class 73. National, state and private banks; loan and trust companies.
- Class 74. Savings banks, postal savings banks, provident savings and loan institutions.
- Class 75. Insurance: life, fraternal, accident, fire, marine, fidelity, and other forms.
- Class 76. Social insurance. Retirement provisions for public employees.

GROUP 22

CHARITIES AND CORRECTION

- Class 77. Care of dependent and neglected children.
- Class 78. Institutional care of destitute adults. Institutional care of defectives.
- Class 79. Relief of needy families in their homes.
- Class 80. Preventive social work. Supervisory and educational movements.
- Class 81. Statistics of crime. Identification of criminals.

- Class 82. Prisons, jails, work-houses, lock-ups. Prison labor, peonage.
- Class 83. Reformatories; education of delinquents.
- Class 84. The juvenile offender. Defective delinquents.
- Class 85. Indeterminate sentence, probation and parole. Aid and relief.

GROUP 23

PREPARATION, ENACTMENT AND ENFORCEMENT OF LEGISLATION

- Class 86. Legislative reference bureaus, commissions, etc. Operation of initiative, referendum and recall. Results of efforts for uniform state and municipal legislation. Police systems and police administration. Courts. Reform in court procedure.

GROUP 24

NOMINATION AND ELECTION SYSTEMS

- Class 87. Qualifications of voters. Party organization. Nomination and election systems. Australian ballot, short ballot, voting machines. Restrictions and publicity of election expenditures. Corrupt practice legislation.

GROUP 25

PUBLIC UTILITIES AND THEIR REGULATION

- Class 88. State, municipally and privately owned utilities. Public service commissions.

GROUP 26

MUNICIPAL ADVANCEMENT

- Class 89. Municipal statistics.
- Class 90. Local government and the State. Charters. Systems of government.
- Class 91. Municipal activities; methods, instrumentalities and results.
- Class 92. Public and private agencies for promoting economy and efficiency.

GROUP 27

- Class 93. Town and city planning. Housing.

GROUP 28

RECREATION

- Class 94. Parks, playgrounds and recreation centers. Baths, swimming pools and bathing beaches. Utilization of school house as social center. Public entertainments. Commercial recreation.

LIBERAL ARTS

DEPARTMENT D

GROUP 29

TYPOGRAPHY—VARIOUS PRINTING PROCESSES

(Equipment, Processes and Products.)

- Class 95. Machinery, presses and other apparatus used in typography, lithography, copper-plate printing, autography, engraving on stone, copper, zinc, aluminum, etc.
- Class 96. Machinery used for photo-mechanical printing.
- Class 97. Equipment, apparatus and products of type foundries, and other auxiliary and miscellaneous printing office appliances and labor-saving devices of stereotyping, electrotyping, electrolytic appliances and processes; electro-thermic appliances and processes.
- Class 98. Machines for setting and distributing type, casting type, etc.
- Class 99. Special equipment for printing bank notes, postage stamps, bonds, etc.
- Class 100. Typewriting machines and devices for duplication of copy, mimeograph, neostyle, addressing machines, dictating machines, etc.
- Class 101. Specimens in black and color typography, lithography, copper-plate printing and other methods of printing.
- Class 102. Specimens of engravings and drawings obtained, reproduced, enlarged or reduced by photo-mechanical processes.

GROUP 30

BOOKS AND PUBLICATIONS—BOOK BINDING

- Class 103. Newspapers, reviews and other periodicals and publications; newspaper and magazine offices or plants shown by models or photographs; means and methods of advertising, news gathering, etc.; methods and processes of publication. (Technical and trade publications may be displayed in the Departments with which they are allied.)
- Class 104. Collections of books, forming special libraries.
- Class 105. New books and new editions of old books.
- Class 106. Drawings for book, newspaper and magazine illustration, atlases, albums.
- Class 107. Musical publications.
- Class 108. Musical scores.
- Class 109. Equipment and processes of making stitched books and of book binding.
- Class 110. Specimens of binding, stamping, embossing, gilding, etc.
- Class 111. Artistic book binding.

GROUP 31

MAPS AND APPARATUS FOR GEOGRAPHY, COSMOGRAPHY, TOPOGRAPHY

- Class 112. Maps, charts and atlases; geographical, topographical, geological, hydrographical, astronomical, etc.
- Class 113. Topographic models in relief.
- Class 114. Terrestrial and celestial globes; statistical works and tables.
- Class 115. Statistical tables and nautical almanacs for the use of astronomers, surveyors and seamen.

GROUP 32

MANUFACTURE OF PAPER

(Raw Materials, Equipment, Processes and Products.)

- Class 116. Collections of raw materials used in the manufacture of paper and card-board.
- Class 117. Equipment and processes used in making pulp from rags, straw, wood, etc.
- Class 118. Appliances and processes used in the manufacture of paper by hand.
- Class 119. Equipment and processes used in the manufacture of paper by machinery. Machines for producing endless paper. Apparatus for cutting, glazing, calendering, polishing.
- Class 120. Apparatus and processes used in the manufacture of special papers and of card-board.
- Class 121. Paper mill products, including papers of common and special grades not made up: paper for newspapers, books, maps, bank notes, drawings; photographic and art papers; paper for stationery; packing, wrapping and blotting paper; filter and laboratory paper; building and stock for wall paper; mill board, and card-board; papier maché, compressed paper, etc.

GROUP 33

PHOTOGRAPHY

(Equipment, Processes and Products.)

NOTE: Photographs relating to any exhibit may be shown in connection therewith in any exhibit palace.

- Class 122. Materials, instruments and apparatus of photography, equipment of photographic studios, stereopticons, mutographs, kinetoscopes, moving pictures, etc.
- Class 123. Negative and positive photography on glass, paper, wood, cloth, films, enamel, etc. Photogravure in intaglio and in relief; photocollography, photolithography. Stereoscopic prints. Enlarged and micrographic photographs. Color photography. Direct, indirect and photo-color printing. Scientific and other applications of photography.
- Class 124. Pictorial photography.

**INSTRUMENTS OF PRECISION, PHILOSOPHICAL APPARATUS,
ETC., COINS AND MEDALS**

(Equipment, Processes and Products.)

- Class 125. Laboratory apparatus for physical investigations; mathematical instruments; instruments for practical geometry; instruments for refined physical measurement; sensitive balances, high grade thermometers, indicators, integrators, chronographs, etc. Lecture room apparatus.
- Class 126. Instruments for and methods of land surveying, including plane, topographic and geodetic surveying. Surveyors' compasses, leveling instruments, transits, geographic instruments, pedometers, heliotropes, etc.
- Class 127. Astronomical instruments and methods; telescopes and fittings, astronomical photographic apparatus and photographs; reflectors, helioscopes, astronomical clocks.
- Class 128. Navigation instruments and equipment; including sextants, mariners' compasses, alidades, patent logs, sounding machines, chronometers, etc. Meteorological instruments, thermometers, barometers, wind current meters, etc.
- Class 129. Electrical instruments and apparatus for scientific investigations or research work; electrical furnaces for laboratory use; thermal batteries; electrical standards.
- Class 130. Photometry: apparatus for determining the intensity, distribution and illuminating power of light. Standards.
- Class 131. Transferred to Class 542.
- Class 132. Optical instruments for general use; telescopes, binoculars, opera, field and marine glasses, magnifying glasses. Lenses for testing vision; eye glasses and spectacles.
- Class 133. Calculating machines; cash registers; scales, weights and measures of various countries.
- Class 134. Equipment for the manufacture of coins and medals. Appliances for weighing the metal, testing the standard of alloys, melting and casting, rolling, stamping out, milling, washing, verification of weight of coins, counting, striking, and checking them before delivery; equipment for the preparation of stamps and dies, coins and medals; treatises upon coins, economical, statistical, etc.

GROUP 35

MEDICINE AND SURGERY

- Class 135. Appliances, instruments and apparatus for work in anatomy, histology and bacteriology; anatomical models; normal and pathological, histological and bacteriological preparations.
- Class 136. Apparatus for sterilizing instruments and wound-dressing appliances, and for other purposes of sterilization.

- Class 137. Instruments for general and special medical research.
- Class 138. Instruments and apparatus for general, special and local surgery.
- Class 139. Electricity as applied in therapeutics, surgery and dentistry; X-ray apparatus; electric sterilizers, ozonizers.
- Class 140. Appliances for dressing wounds.
- Class 141. Apparatus for plastic and mechanical prosthesis; orthopedic apparatus; apparatus for hernia; apparatus for medical gymnastics; material, instruments and apparatus for special therapeutics.
- Class 142. Instruments and apparatus used in the practice of dentistry; dental surgery, bridge and plate work, etc.
- Class 143. Appliances for the use of the infirm, of invalids, and of lunatics; artificial limbs, artificial eyes.
- Class 144. Chests and cases of instruments and medicines for the use of surgeons of the army and navy; appliances for rendering aid to the wounded on the field of battle; appliances for rendering aid in case of accident; ambulance service, etc.
- Class 145. Appliances for rendering aid to persons apparently drowned or asphyxiated.
- Class 146. Instruments and appliances for veterinary surgery.
- Class 147. Equipment and utensils used by druggists and pharmacists.

GROUP 36

CHEMICAL AND PHARMACAL ARTS

(Equipment, Processes and Products.)

- Class 148. Laboratory apparatus and utensils: lamps, blow-pipes; presses, drying ovens, filters; furnaces, ovens, etc., used in chemical laboratory work.
- Class 149. Apparatus and instruments for making industrial and commercial analyses.
- Class 150. Equipment and processes used in the chemical treatment of animal substances, with their products; superphosphates, soaps, candles, glycerine.
- Class 151. Apparatus and processes for the production by electrolysis of hydrogen peroxide, chlorine, hypochlorites, chlorates, soda, bleaching materials, and various other chemicals. Also electro-thermal apparatus and processes for chemical manufacture not otherwise specified.
- Class 152. Equipment and processes used in the manufacture of vegetable essences.
- Class 153. Transferred to Class 776.
- Class 154. By-products for pharmaceutical use obtained from the treatment of mineral substances such as petroleum and coal tar derivatives, etc.
- Class 155. Equipment and processes used in treating waste matter from factories (by chemical or electrical methods) with a view to permitting their return to water courses or to the atmosphere.

- Class 156. Equipment for charcoal work and the production of various derivatives; methylated spirit, acetone, acetic acid, tar, wood alcohol, pyroligneous acid. Products of charcoal burning.
- Class 157. Apparatus and processes for the compression and liquefaction of gas. Liquefied gases.
- Class 158. Apparatus and processes for the manufacture of artificial textiles.
- Class 159. Appliances and processes used in the manufacture of pharmaceutical products. Raw materials of pharmacy; sera and other biological products, as bacterines, vaccines, tuberculines, etc.; drugs of mineral, animal and vegetable origin, crude, powdered and compound; special appliances for collecting, cleaning, peeling, slicing, cutting and garbelling crude drugs.
- Class 160. Disinfectants; standardization of disinfectants; manufacture of disinfectants; drug preservation, drug sterilization, ampuls, etc.
- Class 161. Acids, alkalies, salts and compounds of every kind. Chemical elements derived from their compounds and chemical compounds not otherwise classified.
- Class 162. Refined sulphur and derivatives from sulphur.
- Class 163. Equipment and processes used, and products obtained in the manufacture of phosphorus and matches.
- Class 164. Drug adulteration; methods of adulteration; methods of detecting adulteration.
- Class 165. Various products of chemical industries; tanning materials, waxes, essential oils, glue and gelatine; perfumes, cosmetics and extracts; various glazes, printing ink, blacking.
- Class 166. (Transferred to Manufactures and Agriculture.)
- Class 167. (Transferred to Mines and Metallurgy.)
- Class 168. Alcohols modified for industrial purposes.
- Class 169. Equipment and appliances for producing calcium carbide, and for the storage of acetylene gas.
- Class 170. Insecticides; fungicides; parasiticides and methods of manufacture and use.
- Class 171. Pyrotechnics, bombs, signals, etc.

GROUP 37

MUSICAL INSTRUMENTS

(Materials, Processes and Products.)

- Class 172. Materials and processes for manufacturing musical instruments.
- Class 173. Wind instruments of metal or wood, having openings with or without keys, simple mouth pieces, pipes or reeds, with or without reservoir of air.
- Class 174. Metal wind instruments, plain or with lengthening pieces, slides, pistons, keys or reeds.
- Class 175. Wind instruments with key-board; organs, accordions, etc.
- Class 176. Stringed instruments without key-board, played with the fingers or with a bow.

- Class 177. Pianos, player pianos, and other stringed instruments with keyboard.
- Class 178. Instruments played by percussion or friction; drums and cymbals.
- Class 179. Automatic instruments: barrel organs, bird organs, musical boxes, piano and organ players, bandonians, orchestrions, etc.
- Class 180. Phonographs, talking machines, graphophones and similar devices.
- Class 181. Separate parts of musical instruments and orchestral appliances; strings for musical instruments.

GROUP 38

THEATRICAL APPLIANCES AND EQUIPMENT

- Class 182. Interior equipment and special furniture for theaters.
- Class 183. Arrangements for preventing and extinguishing fires. (See also Class 463.)
- Class 184. Scenery; curtains, metallic curtains, gauzes, nets; colors, brushes, palettes, cordage; special iron work; lighting; electrical apparatus, candelabra, colored screens, apparatus for imitating flame, smoke, lightning, fireworks; projections; spectres; phosphorescence.
- Class 185. Machinery; windlasses, drums, chests, traveling platforms, slides, trolleys, traps, counterweights, flies.
- Class 186. Costumes; special materials, printing on different materials, armor; jewelry; foot-gear; dancing shoes; wigs, beards, make-up; paints for making up.
- Class 187. Properties for the imitation of various phenomena, such as thunder, hail, wind, snow, gun-firing; card-board work of all kinds; furniture made in perspective.

GROUP 39

ELECTRICAL METHODS OF COMMUNICATION

- Class 188. Telephone, telegraph and wireless instruments, dictographs, devices for the deaf, etc.; their apparatus and specific equipment.
- Class 189. Fire alarm systems and equipment; police signals and patrol box systems and equipment; electric annunciators and other electric signal apparatus not classified.

GROUP 40

CIVIL AND MILITARY ENGINEERING

- Class 190. (Transferred to Mines and Metallurgy.)
- Class 191. Methods of testing structural materials, and apparatus used therefor.
- Class 192. (Transferred to Class 215.)

- Class 193. Methods used in earth work, such as the construction of canals, railroads, levees, embankments, etc.
- Class 194. Equipment and methods for the construction and maintenance of roads, streets, promenades and highways.
- Class 195. Equipment for and methods used for preparing foundations: piles, pile-drivers, screw-piles, pneumatic apparatus, caissons, diving apparatus, wire trams, etc.
- Class 196. Passenger elevators, pneumatic tubes, etc.
- Class 197. Military defenses and accessories: engineering material employed in the operation of an army.
- Class 198. (Transferred to Classes 197 and 532.)
- Class 199. Equipment for and methods used in storing and distributing water. (See Class 759 for special methods in mining.)
- Class 200. Equipment for and methods of city sanitation.

GROUP 41

MODELS, PLANS AND DESIGNS FOR PUBLIC WORKS

- Class 201. Roads and other public highways. Construction and maintenance of streets in cities.
- Class 202. Inland navigation; improvement of rivers, construction of canals, dams, locks, lifts, ship railways, reservoirs, spillways and feeders; dredges, pile sinkers, pile drivers, current deflectors, scraping and water-jet devices for removing sand-bars, etc.; pumping stations, mechanical towing and warping; equipment used for the development of river ports.
- Class 203. Sea ports (general arrangements); piers, docks, jetties, basins; equipment for development (not including shipping).
- Class 204. Bridges and viaducts; railway, road and foot bridges.
- Class 205. Maritime canals.
- Class 206. Protection against flooding by rivers or by sea; levees, dikes and sea walls.
- Class 207. Railways as regards plan and profile of the line, and engineering works, subways, elevated lines, tunnels.
- Class 208. Statistics, maps and publications relative to public works; transactions and other features pertaining to engineering societies.

GROUP 42

ARCHITECTURE

- Class 209. Drawings, models and photographs of completed buildings.
- Class 210. Drawings, models and photographs of artistic architectural details.
- Class 211. Designs for mosaics and for mosaic and leaded glass.

GROUP 43

ARCHITECTURAL ENGINEERING

- Class 212. Models and working plans of public and commercial buildings, large and small dwelling houses, flats, apartment houses, and other architectural structures.
- Class 213. Models, detail drawings and specifications for foundations, walls, partitions, floors, roofs and stairways, wood and metal framing, etc.
- Class 214. Designs and models of special contrivances for safety, comfort, and convenience in the operation of moving stairways, doors, windows, house signals, fire escapes, ventilators, etc.
- Class 215. Working plans for the trades, mason, carpenter, etc., connected with building construction; designs and models of bonds, arches, coping, vaulting, etc.; plastering and construction of partitions.

MANUFACTURES AND VARIED INDUSTRIES

DEPARTMENT E

GROUP 44

STATIONERY, DESK ACCESSORIES, ARTISTS' MATERIALS

- Class 216. Equipment for and processes used in making or preparing stationery, account books, copy books, envelopes, bags, wrappers.
- Class 217. Made-up paper and card-board; ruled, bordered or ornamented paper, note paper, envelopes, pockets, bags; school copy books, memorandum books, note books, letter-copying books, account books, book covers; menu cards, playing cards, paper boxes, cases; packages of cigarette papers, etc.
- Class 218. Desk furnishings, inks, pens, pencils, penholders, crayon holders, wax and wafers, paper weights, ink stands, letter presses, etc.
- Class 219. Artists' materials for painting, architecture, sculpture, pyrography, and drawing; canvases, panels, crayons, brushes, hair pencils; mathematical instruments for architects, etchers, engravers, burners, sculptors; tracing papers and cloths; parchments; colors, varnishes, charcoals, pastels, stumps, lay figures, easels; color boxes and other artists' material not named above.

GROUP 45

CUTLERY

- Class 220. Special equipment for the manufacture, grinding and polishing of cutlery.
- Class 221. Table cutlery, pocket knives, knives with fixed blades.
- Class 222. Cutlery for gardens, and for various trades.
- Class 223. Scissors and work-box accessories.
- Class 224. Razors of all kinds.
- Class 225. Fine cutlery in polished steel.
- Class 226. Small silversmiths' ware.
- Class 227. Side arms of all kinds.

GROUP 46

SILVERSMITHS' AND GOLDSMITHS' WARE

(Appliances, Processes and Products.)

- Class 228. Special equipment for manufacture, hand tools; outfits for casting; machinery (lathes, scales, etc.); outfits for electro-plating, etc. Methods of work.
- Class 229. Goldsmiths' and silversmiths' work for religious or common uses in gold, silver, bronze or other metal; plated ware; articles gilt or silver-plated by any process.
- Class 230. Enameled work: goldsmiths' enamel; enamels painted upon metal.

GROUP 47

JEWELRY

(Equipment, Processes and Products.)

- Class 231. Special equipment. Methods of work.
- Class 232. Fine jewelry; gold and silver jewelry; jewelry in platinum, aluminum, etc.; jewelry set with precious stones; jewelry in debased gold for exportation.
- Class 233. Lapidary work; diamond cutting; cutting of gems; engraving of fine stones; engraving of hard cameos and of shells.
- Class 234. Imitation lapidary work. Imitation of precious stones, pearls, etc.
- Class 235. Gilt jewelry; imitation jewelry in copper and other metals; steel jewelry; mourning jewelry in jet and glass; jewelry in coral, amber, mother-of-pearl, etc.

GROUP 48

CLOCK AND WATCH MAKING

(Equipment, Processes and Products.)

- Class 236. Special equipment for manufacturing clocks and watches; hand tools; machine tools (lathes and other tools); measuring instruments.
- Class 237. Preparation of various metals used by watch and clock makers; separate parts of watch and clock work; springs; watch cases in precious or common materials; holes and fittings in rubies or in other jewels; enameled or other dials, etc.
- Class 238. Clocks for churches and public buildings, time recorders.
- Class 239. Astronomical clocks. Marine chronometers.
- Class 240. Clocks moved by electricity, air or water.
- Class 241. Ornamental clocks and timekeepers; regulators; alarm clocks.
- Class 242. Watches; pocket chronometers; watchmen's time registers.
- Class 243. Metronomes, various recording instruments. Clepsydras and hour glasses.
- Class 244. Chimes connected with clock work.

GROUP 49

OBJECTS EXHIBITED MORE FOR THEIR ORNAMENTAL DESIGN THAN FOR THEIR UTILITY

- Class 245. Special designs and patterns in glass.
- Class 246. Special designs in earthenware, pottery or porcelain.
- Class 247. Special designs in metal.
- Class 248. Special designs in leather.
- Class 249. Special designs in wood.
- Class 250. Special designs in textiles.

GROUP 50

ORNAMENTAL PRODUCTIONS IN MARBLE, BRONZE, CAST IRON AND WROUGHT IRON

(Equipment, Processes and Products.)

- Class 251. Special equipment for the manufacture of ornamental metal objects; types of foundries; patterns and moulds. Outfit for and specimens of repoussé work; processes for mechanical reduction.
- Class 252. Reproductions of works of art in marble, stone, plaster, terra cotta, wax, etc. Ornamentally stamped and damascened metals.

GROUP 51

LEADED, STAINED AND MOSAIC GLASS

- Class 253. Glass for churches, public buildings and private dwellings. Specimens of various kinds of glass used for decorative windows. Special enamels.

GROUP 52

BRUSHES, FINE LEATHER ARTICLES, FANCY ARTICLES AND BASKET WORK

(Equipment, Processes and Products.)

- Class 254. Equipment and methods used in the manufacture of brushes, fine leather articles, fancy articles and basket work.
- Class 255. Brushes; toilet brushes designated as fine brushes; brushes for household, harness and stable use, etc., designated as coarse brushes; brushes for house painting, designated as paint brushes; feather brushes; brooms; floor brushes.
- Class 256. Fine leather goods; scabbards, portmonnaies, portfolios, toilet cases, note book covers, cigar cases, small objects and fancy articles in skins; clasps for portmonnaies and handbags.
- Class 257. Fancy articles; work boxes and small fancy furniture; liquor cases, glove boxes, jewel cases; turned articles, engine turned, carved, engraved in ivory, tortoise shell, mother-of-pearl, etc., pipes and smokers' articles, snuff boxes; toilet and other combs in ivory, tortoise shell, horn, celluloid, boxwood, etc.; various articles in lacquer work, small bronzes.
- Class 258. Basket work; basket and hampers for common use; fancy baskets for confectioners, for household use, traveling, etc.

GROUP 53

ARTICLES FOR TRAVELING AND FOR CAMPING. INDIA RUBBER AND GUTTA PERCHA INDUSTRIES

- Class 259. Trunks, valises, bags, satchels, baskets, dressing and traveling cases; packing cases and boxes; shawl straps, etc. Locks and other fittings for trunks, valises, etc. Cushions. Alpenstocks, grapnels, parasols. Various requisites for travelers.

- Class 260. Portable equipment specially prepared for traveling and for scientific expeditions; outfits for geologists, mineralogists, naturalists, colonists, pioneers, explorers, etc.
- Class 261. Tents and accessories. Beds, hammocks, seats, folding chairs, and other camp furniture and equipment. Portable houses.
- Class 262. Tents and furniture of military types.
- Class 263. Equipment and methods used in the manufacture of India rubber and gutta percha goods.
- Class 264. Commercial products of the India rubber and gutta percha industry. Waterproof clothing and boots and shoes. Rubber floor covering. Substitutes for rubber.

GROUP 54

HUNTING EQUIPMENT AND PRODUCTS OF HUNTING

- Class 265. Sportsmen's and trappers' arms and accessories; sportsmen's ammunition.
- Class 266. Hunting equipment; appliances for training dogs.
- Class 267. Material, dress and equipment for games and sports. Sporting goods and supplies; track paraphernalia.
- Class 268. Skins and furs in the rough; skins prepared for the furrier. Taxidermists' work.
- Class 269. Horn, ivory, bone, tortoise shell.

GROUP 55

FISHING EQUIPMENT AND PRODUCTS

- Class 270. Floating appliances used in fishing. Nets, tackle, boats; devices and implements for sea fishing. Nets, traps and appliances for fresh water fishing.
- Class 271. Anglers' apparel, rods, reels and lines.
- Class 272. Machines and equipment for making nets.
- Class 273. Sea and fresh water pearls; pearl shells and mother-of-pearl; sponges; corals.

GROUP 56

TOYS

- Class 274. Equipment and processes used in the manufacture of toys.
- Class 275. Playthings: dolls, talking dolls and accessories, playthings in metal, dolls' dinner and tea services, children's watches, mechanical toys, arms and equipment for children, musical instruments, dolls' furniture, horses, animals, carts, toys in India rubber and in gold beaters' skin, scientific and educational toys. Games. Children's books.

GROUP 57

PERMANENT DECORATION AND FIXED FURNITURE FOR BUILDINGS AND DWELLINGS

- Class 276. Plans, drawings and models of interior decorations.

- Class 277. Carpentry; models of frame work, roof work, vaults, domes, wooden partitions, etc.
- Class 278. Ornamental joiner work; doors, windows, panels, inlaid floors, organ cases, choir stalls, etc.
- Class 279. Permanent decorations in marble, stone, plaster, papier-maché, carton pierre, etc.
- Class 280. Ornamental carvings and pyrographics.
- Class 281. Iron work and locksmiths' work applied to decoration; grill work and doors in cast or wrought iron; doors and balustrades in bronze; roof decoration in lead, copper, zinc; dormers, spires, finials, vanes; crest and ridge work.
- Class 282. Decorative paintings on stone, wood, metal, canvas or other surfaces. Signs of all varieties.
- Class 283. Mosaic decorations in stone or marble for flooring; enameled mosaic for walls and vaulted surfaces.
- Class 284. Various applications of ceramics to the permanent decoration of public buildings and dwellings. (See also Ceramics.)

GROUP 58

OFFICE AND HOUSEHOLD FURNITURE AND UTILITIES

- Class 285. Sideboards, bookcases, tables, stands, beds, mirrors, desks, files, filing systems, cabinets, wardrobes, chiffoniers, chairs, settees, couches and lounges, billiard tables, etc.; vacuum cleaners, carpet sweepers, washing machines, etc.

GROUP 59

MORTUARY MONUMENTS AND UNDERTAKERS' FURNISHINGS

- Class 286. Marble, stone and metal monuments; mausoleums and fittings.
- Class 287. Coffins, caskets and undertakers' furnishing goods.

GROUP 60

HARDWARE AND WOODENWARE

- Class 288. Special tools (not included in the class of machine tools) used by smiths, farriers, bolt makers, screw cutters, wire drawers, nail makers, buckle makers, chain makers, copper-smiths, tin-smiths, edge tool makers, iron founders, ironmongers, locksmiths, model makers, etc.
- Class 289. Hardware not otherwise provided for, made of plates, forgings, or castings. Fittings, cocks, taps, etc. Bells; buckles; machine-made bronzes; shoes for horses and for other animals; flatirons, etc.
- Class 290. Bolts, nuts and screws for wood or metal.
- Class 291. Products of nail making and wire drawing: nails, brads, tacks, staples; wire ropes, barbed wire, wire fencing, wire cloth, and wire gauze; wire springs; rings and hooks.
- Class 292. Chain making products and kindred industries.
- Class 293. Metal plates, flanged, stamped, decorated, perforated, etc., builders' work in sheet metals.

- Class 294. Enameled plates and castings for buildings, household and general use.
- Class 295. Hollow ware (cast or pressed) plain, polished, japanned, enameled, granitized or porcelain lined. Metal household utensils.
- Class 296. Articles from the re-manufacture of sheet metals, produced by cutting, drawing, stamping, spinning; including caps, ferrules, small boxes, cans metal vessels, lamp shades, etc.
- Class 297. Woodworking hand tools; axes, adzes, hatchets, chisels, planes, boring tools, saws, hammers, etc.
- Class 298. Builders' and upholsterers' hardware; fittings and fastenings for doors, windows, etc.; casters, clamps, brackets, pulls, etc.
- Class 299. Safes, safety vaults and accessories; safe locks.
- Class 300. Metal work (cast, wrought, or wire) for stair railings, balusters, gratings, balconies, grill work, etc.
- Class 301. Metal work (plated, enameled, etc.) for bed-steads, gas and electric light fixtures, store fixtures, cash carriers, etc.
- Class 302. Summer houses and pavilions in metal; lawn bird cages, aviaries, awnings, awning fittings, verandas.
- Class 303. Metal shutters for windows, doors; screens and Venetian blinds.
- Class 304. Various products of exact rolling or of beating of gold, silver and tin; metallic foils.
- Class 305. Various hardware products of gilding, silver-plating, copper-plating, bronzing, galvanizing, nickel-plating, electro-plating.
- Class 306. Woodenware for household use. Miscellaneous manufactured articles of wood not otherwise classified. Baskets and boxes of split wood.

GROUP 61

ELECTRO-THERMAL APPARATUS

- Class 307. Electric cooking devices, clothes pressing irons, air heaters, etc.

GROUP 62

INSULATING MATERIALS FOR ELECTRICITY

- Class 308. Insulating materials of mica, glass, rubber, porcelain and other substances; insulating compounds and fabrics. (For devices made of insulating materials see Class 510.)

GROUP 63

PAPER HANGING

(Raw Materials, Equipment, Processes and Products.)

- Class 309. Special raw materials used in the manufacture of wall paper.
- Class 310. Machinery for printing wall paper and fancy papers. Machines for engraving printing rollers. Flat wood blocks or copper plates, engraved by hand. Drawing pens. Machines for varnishing, glazing, calendering, embossing, gilding, flocking, rolling and cutting.
- Class 311. Special brushes and cloths used in the laying of wall paper.

- Class 312. Stained papers, printed papers. Flocked, marbled, veined, gilt, enameled and glazed paper. Imitations of wood, leather and tapestry.

GROUP 64

CARPETS, TAPESTRIES AND FABRICS FOR UPHOLSTERY

(Materials, Equipment, Methods and Products.)

- Class 313. Special machinery for the manufacture of carpets and tapestry; high warp looms, low warp looms, bobbin-winders, etc.
- Class 314. Carpets, moquette, tapestry, brussels, or velvet. Felt carpets, mats, etc.
- Class 315. Furniture and wall covering materials in silk, wool, cotton, linen, jute, ramie, grass, plain, mixed, brocaded, printed, embroidered. Horse-hair cloths, vegetable leather, moleskin, etc. Leather for hangings and for covering furniture. Oil cloths, linoleums and similar floor coverings.

GROUP 65

UPHOLSTERERS' DECORATIONS

- Class 316. Decoration for public and private festivals, for religious services, etc. Buntings, flags.
- Class 317. Bed furnishings; upholstered chairs; canopies, curtains, window shades and fittings; hangings of cloth or tapestry; frames; etc.

GROUP 66

CERAMICS

(Raw Materials, Equipment, Processes and Products.)

- Class 318. Raw materials, particularly chemical products used in ceramic industries.
- Class 319. Equipment and methods used in the manufacture of earthenware; machines for turning, pressing and moulding earthenware; furnaces, kilns, muffles, and baking apparatus for earthenware; appliances for preparing and grinding enamels.
- Class 320. Various porcelains.
- Class 321. Bisque of porcelain and of earthenware.
- Class 322. Earthenware of white or colored body, with transparent or tin glazes. Faience.
- Class 323. Earthenware and terra cotta for agricultural purposes.
- Class 324. Stoneware, plain and decorated.
- Class 325. Tiles, plain, encaustic and decorated; mosaics, tiles and bricks for floors. (See also Group 153.)
- Class 326. Fire-proof materials. (See also Group 153.)
- Class 327. Statuettes, groups and ornaments in terra cotta.

- Class 328. Enamels applied to ceramics.
Class 329. Borders for fireplaces and mantels.

GROUP 67

PLUMBING AND SANITARY MATERIALS

- Class 330. Sanitary earthenware; bathing apparatus and attachments, lavatory fittings, laundry tubs, basins, cocks, draws, etc.; sewerage apparatus, plumbers' appliances.

GROUP 68

GLASS AND CRYSTAL

(Raw Materials, Equipment, Processes and Products.)

- Class 331. Raw materials and particularly chemical products used in the manufacture of glass.
Class 332. Equipment and processes used in the manufacture of glass and crystal; equipment for the preparation of raw materials; furnaces; blowing apparatus; moulds; lathes for engraving and shaping; apparatus for cutting and for casting, etc.
Class 333. Window glass, white or colored, fluted, curved, enameled, etc. Glass for photography.
Class 334. Plate glass, rough or polished. Silvered glass. Glass for pavements. Mirrors for projections. Glass with surface in relief.
Class 335. Table glass; glass crystal, white or colored, cut or engraved; glassware and glass apparatus for scientific uses.
Class 336. Ornamental glass. Fused quartz products.
Class 337. Bottles.
Class 338. Enamels; their application to glass.
Class 339. Mosaics of glass. (Architectural mosaics excepted.)
Class 340. Imitation of precious stones.
Class 341. Watch glasses.
Class 342. Glass used for optical purposes; spectacle glass. Lens grinding machinery.

GROUP 69

APPARATUS AND PROCESSES FOR HEATING AND VENTILATION

- Class 343. Plans and models showing methods of heating buildings, including public buildings, factories, dwelling houses. Plans and models for sanitation and ventilation of kitchens and small living rooms.
Class 344. Methods of conveying and distributing steam, hot water and hot air, used separately or in combination.
Class 345. Plans, methods and equipment for natural ventilation; ventilation by exhaustion; up-draft ventilators; ventilators operated by wind or by difference of temperature; ventilation by mechanical means and their combination.

- Class 346. Stoves, furnaces and boilers, peculiar to the various systems of hot air, hot water and steam heating. Heating stoves using wood, coal, gas or other fuel. Fittings for same.
- Class 347. Radiators of heat used in connection with heating systems.
- Class 348. Kitchen ranges and fittings, steam cooking ranges, hot water boilers, combined cooking and heating stoves, special forms of cooking stoves and apparatus. Ranges and other kitchen equipment for preparing food in large quantities. Cooking utensils.
- Class 349. Accessories to heating and ventilation. Measuring and registering apparatus; ordinary and self-registering thermometers, pyrometers, anemometers; regulators of temperature, of draft, of pressure; automatic drip cocks and air cocks, cocks especially fitted for heating apparatus, electric thermostats.
- Class 350. Chimney fittings. Dampers for chimneys, flue stoppers, special sheet iron chimney pots. Openings for hot air and ventilation; gratings and plates.
- Class 351. Stoves and chimneys in earthenware. Fireplace and chimney pottery. Earthenware and refractory materials for heaters, stoves and chimneys.
- Class 352. Hearth furnishings; fire lighters; ash sifters; utensils for cleaning and repairing heaters and stoves; other accessories.

GROUP 70

MANUFACTURE, DISTRIBUTION AND USES OF GAS FOR LIGHT AND FUEL

- Class 353. Manufacture of gas: processes and apparatus for manufacturing gas from coal; processes and apparatus for manufacturing water gas; processes and apparatus for manufacturing oil gas; apparatus and materials for the physical and chemical cleansing of gas; apparatus for testing crude materials and manufactured gas.
- Class 354. Distribution of gas: pipe, pipe fittings, valves, pressure-regulating apparatus; tools used in laying mains or services; meters and gas measuring apparatus; appliances for the transmission of gas, including exhausters and compressors. (See Class 464.)
- Class 355. Uses of gas: incandescent gas lamps and mantels, gas burners, and appliances for gas lighting; appliances for cooking by gas; appliances for heating by gas, including water heaters and hot air furnaces; appliances for utilizing gas for industrial purposes.

GROUP 71

APPARATUS AND METHODS FOR LIGHTING, NOT OTHERWISE CLASSIFIED

- Class 356. Lighting by means of vegetable or mineral oils, petroleum, shale heavy oil, heavy oil sprayed. Lamps, burners, wicks, lamp chimneys, and other accessories. Apparatus for domestic, industrial and public lighting.

- Class 357. Lighting by acetylene gas or vaporized gasolene, alcohol, etc. Lamps, burners, chimneys, and other accessories and apparatus for domestic, industrial and public lighting.
- Class 358. Accessories to lighting: lighters, glasses, globes, shades, reflectors, screens, smoke consumers, chandeliers and fixtures.

GROUP 72

TEXTILE MATERIALS, SPINNING AND ROPE MAKING*

- Class 359. Machinery and apparatus used in preparing and spinning textile materials. Specimens of materials showing progress of work.
- Class 360. Detached parts of spinning machinery and special machines for their manufacture.
- Class 361. Apparatus used in subsequent operations; spooling, winding, twisting, throwing. Mechanical finishing of goods.
- Class 362. Apparatus for sorting, testing and registering. Apparatus for perfecting. Equipment for making cordage.

GROUP 73

EQUIPMENT AND PROCESSES USED IN THE MANUFACTURE OF TEXTILE FABRICS*

- Class 363. Apparatus used in operations preliminary to weaving; machines for warping, cop winders. Card preparing machines.
- Class 364. Hand and power looms for weaving plain cloths. Looms for weaving brocaded and embroidered fabrics, box looms.
- Class 365. Knitting machinery for hosiery. Machinery for making lace and tulle. Machinery for making trimmings.

GROUP 74

EQUIPMENT AND PROCESSES USED IN BLEACHING, DYEING, PRINTING AND FINISHING TEXTILES IN THEIR VARIOUS STAGES

- Class 366. Apparatus for singeing, brushing and shearing textile fabrics.
- Class 367. Apparatus for washing in lye, scouring, washing, drying, and moistening various textile materials, whether matted, combed, in thread or in web.
- Class 368. Apparatus for boiling and staining dye stuffs and stuffs for thickening fabrics.
- Class 369. Equipment for engraving in relief, or in incised work patterns, for printing on textiles.
- Class 370. Machines for starching, dyeing or printing. Apparatus for steaming.
- Class 371. Machinery of all kinds for finishing goods, for fulling, and for teaseling; tenterframes, calenders, machines for glazing, watering, embossing, beetling. Machines for measuring, folding, etc.
- Class 372. Appliances used for dyeing silks, for beating, shaking up, pinning out, lustering, etc.

*Textile machinery not in operation as part of a process exhibit will be installed in Machinery Hall.

- Class 373. Sweating boxes for thickening, apparatus for spotting, apparatus for bleaching by electricity.
- Class 374. Equipment and processes for laundry work. Washing and rinsing, bluing, drying, bleaching, ironing and finishing.
- Class 375. Industry of the dyers and scourers; dry cleaning by benzine and by other substances; cleaning by wet process; dyeing, pressing.
- Class 376. Specimens of textile materials bleached or dyed before spinning.
- Class 377. Specimens of threads or yarns of cotton, linen, wool, silk, etc., pure or mixed, bleached, dyed or mottled.
- Class 378. Specimens of textile fabrics bleached, dyed or printed.
- Class 379. Specimens of threads, yarns or fabrics which have been sized.
- Class 380. Specimens of chemical thickening of textile materials before they have been spun or woven.

GROUP 75

EQUIPMENT AND PROCESSES USED IN SEWING AND MAKING WEARING APPAREL

- Class 381. Common implements used in needle work.
- Class 382. Machines for cutting cloth, skins and leathers.
- Class 383. Machines for sewing, stitching, hemming, embroidering, etc.
- Class 384. Machines for making button-holes; for sewing gloves, leather, etc.; for plaiting straw.
- Class 385. Tailors' geese, flatirons and equipment.
- Class 386. Busts and figures for trying on garments.
- Class 387. Machines for plaiting straw for hats and making hats of straw, felt, etc.

GROUP 76

THREADS AND FABRICS OF COTTON

- Class 388. Cotton prepared and spun.
- Class 389. Fabrics of cotton, pure or mixed, plain or figured, unbleached, dyed or printed.
- Class 390. Cotton velvets.
- Class 391. Cotton ribbons.
- Class 392. Counterpanes.

GROUP 77

THREADS AND FABRICS OF FLAX, HEMP, ETC.; CORDAGE

- Class 393. Thread of flax, hemp, jute, ramie and other vegetable fibers.
- Class 394. Plain and figured canvas. Ticking. Damask linen. Cambries and lawns. Plain and fancy handkerchiefs.
- Class 395. Fabrics of flax, or hemp, mixed with cotton or silk.
- Class 396. Fabrics and vegetable fibers other than cotton, flax, hemp, jute or ramie.
- Class 397. Cordage, cables, rope, twine, etc.

GROUP 78

YARNS AND FABRICS OF ANIMAL FIBERS

- Class 398. Combed animal fibers. Yarn of combed animal fibers.
- Class 399. Carded animal fiber. Rovings unbleached or dyed. Yarn of carded animal fibers.
- Class 400. Cloths of combed or carded animal fibers.
- Class 401. Cloths for ladies' wear, made from animal fiber.
- Class 402. Dress goods of combed or carded animal fibers, mixed with cotton or silk.
- Class 403. Muslin delaine, tweeds, merinos, china-satins, serges, mohairs, etc.
- Class 404. Fabrics of carded animal fibers, not fullled or slightly fullled; flannels, tartans, molletons, etc.
- Class 405. Knitted stuffs in combed or carded animal fibers.
- Class 406. Shawls of animal fibers, pure or mixed. Cashmere shawls.
- Class 407. Ribbons and braids of animal fibers, pure or mixed with cotton, flax, silk or floss silk.
- Class 408. Fabrics of hair, pure or mixed.
- Class 409. Blankets.
- Class 410. Felts of animal fibers for carpets, hats, boots and shoes, etc.

GROUP 79

SILK AND FABRICS OF SILK

- Class 411. Silk raw, thrown, twisted.
- Class 412. Floss silk and silk waste.
- Class 413. Threads of floss silk and silk waste.
- Class 414. Artificial silks.
- Class 415. Fabrics of pure silk, silk floss, or silk waste; fabrics of silk or silk floss mixed with gold, silver, wool, cotton, thread, etc., plain, figured, or brocaded, unbleached, dyed or printed.
- Class 416. Velvets and plushes.
- Class 417. Ribbons of silk, or silk floss, pure or mixed.
- Class 418. Shawls of silk or silk floss, pure or mixed.

GROUP 80

LACES, EMBROIDERY AND TRIMMINGS

- Class 419. Lace made by hand; laces, blonde or guipure, wrought on pillow or with the needle or crochet, made of flax, cotton, silk, wool, gold, silver or other threads.
- Class 420. Laces made by machinery; tules, plain or embroidered; imitation lace, blonde and guipure, in thread of every kind.
- Class 421. Embroidery made by hand; embroidery by needle or crochet with thread of every kind, on all kinds of grounds (fabric, net, tulle, skin, etc.) including needle work upon canvas as well as embroidery appliqué, or ornamented with gems, pearls, jet, spangles of metal, or other material, feathers, shells, etc.

- Class 422. Embroidery made by machinery, with the foundation preserved, or with the foundation cut or burned away.
- Class 423. Trimmings: galloons, lace or braids, fringes, tassels, all kinds of appliqué and ornamental work, hand-made or woven, for millinery or garments, ecclesiastical vestments, civil or military uniforms; for furniture, saddlery, carriages, etc. Threads and plates of metal, gold or silver, real or imitation, spangles, chenilles, and all other articles used for trimmings.
- Class 424. Church embroidery; church ornaments and linen; altar cloths, banners and other objects for religious ceremonies in fabrics, ornamented with lace, embroideries and trimmings.
- Class 425. Curtains with lace, guipure, or embroidery, upon tulle or fabrics; blinds, screens, portières, lambrequins, and other draperies, ornamented with lace, embroidery and trimmings.

GROUP 81

INDUSTRIES PRODUCING WEARING APPAREL FOR MEN, WOMEN AND CHILDREN

- Class 426. Clothing to measure for men and boys; ordinary costumes, suits for hunting and riding, leather breeches and similar articles, suits for gymnastic uses and games, military and civil uniforms, campaign clothing of special types, robes and costumes for magistrates, members of the bar, professors, ecclesiastics, etc., liveries, various costumes for children.
- Class 427. Clothing, ready made for men and boys.
- Class 428. Clothing to measure for women and girls; dresses, vests, jackets, cloaks (made by ladies' tailors, dress makers, or cloak makers), riding habits, sporting suits.
- Class 429. Clothing ready made for women and girls. Patterns.

GROUP 82

FURS AND SKINS, FUR CLOTHING; LEATHER, BOOTS AND SHOES

- Class 430. Furs and skins, dressed and tanned.
- Class 431. Fur clothing, caps, hats, hoods, gloves, boots, etc.
- Class 432. Fur mats and robes; fur trimmings.
- Class 433. Leather in every variety; tanned, curried, enameled, patent leather, wash leather, etc.
- Class 434. Machines for cutting and preparing parts of boots or shoes; machines for sewing boots or shoes; machines for lasting, pegging, nailing, screwing.
- Class 435. Boots and shoes, for men, women and children; boots, bootees, shoes, slippers, pumps, overshoes, soles, accessories, etc.; gaiters.
- Class 436. Military and naval campaign footwear.
- Class 437. Gloves made of skins.

VARIOUS INDUSTRIES CONNECTED WITH CLOTHING

- Class 438. Hats; hats of felt, wool, straw, or silk; caps; trimmings for hats.
- Class 439. Artificial flowers for dressing the hair, for dress, and for all other uses. Feathers. Millinery. Hair: coiffures, wigs and switches.
- Class 440. Shirts and underclothing for men, women and children.
- Class 441. Hosiery and gloves of cotton, wool, silk and floss silk, etc., knitted hosiery; cravats and neck-ties.
- Class 442. Corsets.
- Class 443. Elastic goods, suspenders, garters, belts.
- Class 444. Canes, whips, riding whips, sun-shades, parasols, umbrellas.
- Class 445. Buttons: buttons of china, metal, cloth and silk, mother-of-pearl, and other shell, ivory-nut, horn, bone, papier-mache, etc.
- Class 446. Buckles, eyelets, hooks and eyes, pins, needles, etc.
- Class 447. Fans and handscreens.

GROUP 84

SAFETY APPLIANCES

- Class 448. Safety appliances and devices for protection of those engaged in manufacturing work and processes, not exhibited in connection with machines. (See also Classes 472 and 476.)

MACHINERY

DEPARTMENT F

GROUP 85

STEAM GENERATORS AND MOTORS UTILIZING STEAM. ACCESSORY APPLIANCES

- Class 449. Steam engines and steam turbines, portable, semi-portable and stationary; valve gear, governors, lubricating apparatus, and accessories attached.
- Class 450. Boilers, stationary, marine, portable and semi-portable; boiler equipment, including furnaces, grate bars, smoke stacks, mechanical stokers, oil burners, oil and other fuel systems, mechanical flue and tube cleaners; forced and natural draft apparatus and equipment; fuel economizers, superheaters; boiler fittings; coal handlers and conveyors; ash handling systems and apparatus.
NOTE: Agricultural and road-making machinery is not included herewith.
- Class 451. Appliances for handling and purifying feed water: feed pumps and injectors, feed-water regulators, feed tanks; feed-water heaters; chemical and mechanical purifiers, oil extractors, scale removing appliances and compounds; water softening compounds. (See Class 462.)
- Class 452. Valve gear, governors and speed regulators for steam engines or turbines, not attached.
- Class 453. Equipment for transmission and control of steam: steam piping and piping systems, including pipe, valves, fittings, steam hose, traps, separators and exhaust heads.
- Class 454. Condensing apparatus: surface and jet condensers; air pumps, dry vacuum pumps, circulating pumps; cooling towers, cooling systems.
- Class 455. Methods and appliances for testing and recording the performances of engines, turbines, boilers, condensers, their auxiliaries, and other machinery: pyrometers, steam thermometers, calorimeters, steam meters, CO² recorders, flue gas analysis apparatus for steam power plants; counters, gages, indicators, tachometers, and dynamometers.

GROUP 86

INTERNAL COMBUSTION MOTORS

- Class 456. Internal combustion engines, gas turbines, and all motors in which internal combustion of the fuel takes place; apparatus and systems for supplying fuel for internal combustion motors.
NOTE: This group does not include motors attached to mobile devices (such as automobiles), nor does it include agricultural or road making machinery.

GROUP 87

HYDRAULIC MOTORS

- Class 457. Impulse wheels, turbines and other motors driven by water power, and apparatus for their regulation and control.

GROUP 88

MISCELLANEOUS MOTORS

- Class 458. Motors operated by heated air, or other means, not elsewhere classified.

GROUP 89

GENERAL MACHINERY AND ACCESSORIES

- Class 459. Appliances for handling heavy weights; overhead traveling and stationary cranes, operated by hand or power; hoisting engines, jacks, differential pulleys. (Marine and mining equipment not included.)
- Class 460. Conveying machinery: belt, bucket and movable table or roller conveyors; trolley conveyors. (For special apparatus in mining see Classes 750, 756 and 780.)
- Class 461. Power-transmitting appliances: leather, fiber, chain, link and other belting; cable and rope drives; gearing, shafting, couplings, pulleys, clutches, hangers, and pedestals.
- Class 462. Apparatus for lifting and handling water and other liquids: hand, steam and power driven pumps, pulsometers, air lifts, hydraulic rams; water pipe and accessories; water meters. (See also Classes 451, 470, 530, 554, 559 and 751 for pumps for special uses.)
- Class 463. Fire engines, extinguishers and fire fighting apparatus. (See Class 183.)
- Class 464. Air and gas compressors and accessories. (See also Classes 354 and 749.)
- Class 465. Brick and tile making machinery. (Transferred to Class 765.)
- Class 466. Dredging and excavating machinery and appliances. (For railroad machinery see Class 520. For mining machinery see Class 759.)
- Class 467. Refrigerating machinery. (See also Classes 531 and 601.)
- Class 468. Packing, gaskets, heat insulating material, lubricators, lubricants, lubricating systems, metal for bearings.
- Class 469. General machinery not otherwise classified.

GROUP 90

TOOLS FOR SHAPING WOOD AND METALS

- Class 470. Steam forging hammers, hydraulic forging presses; hydraulic accumulators, intensifiers, pumps and accessories; extruding presses; hand and power shears, punches and blank cutters for metals; plate bending and planing machines; drop forging hammers; swaging presses; riveting machines. (See Class 462.)
- Class 471. Apparatus, equipment and compounds used in annealing, hardening, tempering, brazing and soldering metals.
- Class 472. Machine tools, lathes, planers, shapers; drilling, boring, milling,

slotting and splining machines; bolt, nut and pipe machines; metal saws; forcing presses; polishing and finishing machines for metals; machines for rough grinding. All machine tool attachments; safety devices when attached to machines; portable power tools; tool grinding machines; machine shop accessories.

- Class 473. Machinery for grinding accurate surfaces; screw cutting machines; presses and spinning lathes for shaping sheet metals.
- Class 474. Hand tools for machinists: measuring tools; bench tools; etc.
- Class 475. Machines and tools for boiler shop and sheet metal shop work, not elsewhere classified.
- Class 476. Wood working machinery: power saws, wood lathes, planers and jointers, and other wood working power tools other than saw-mill equipment; equipment for bending or pressing wood; box and basket machinery. Attachments for wood-working machinery. Safety devices for wood working machinery when shown attached to machines. (See Class 448.)
- Class 477. Special machinery for various purposes, not otherwise classified.

ELECTRICAL GROUPS

GROUP 91

COMMUTATING APPARATUS

- Class 478. Direct-current commutating generators, all types.
- Class 479. Synchronous commutating machines, comprising synchronous converters, motor converters and double current generators.
- Class 480. Direct and alternating current commutating type motors.
- Class 481. Direct and alternating current commutating type railway motors.

GROUP 92

SYNCHRONOUS APPARATUS

(All Alternating Current)

- Class 482. Synchronous generators, all types.
- Class 483. Synchronous motors.
- Class 484. Synchronous condensers.
- Class 485. Synchronous frequency changers.
- Class 486. Synchronous rotary phase converters.

GROUP 93

STATIONARY INDUCTION APPARATUS

- Class 487. Transformers (including induction coils) and autotransformers, all types.
- Class 488. Potential regulators and reactances, all types.
- Class 489. Induction starters.

ROTARY INDUCTION APPARATUS

- Class 490. Induction generators, all types.
- Class 491. Induction motors.
- Class 492. Induction condensers.
- Class 493. Induction frequency changers.
- Class 494. Induction rotary phase converters.

GROUP 95

UNIPOLAR (ACYCLIC) APPARATUS

- Class 495. Unipolar (Acyclic) apparatus.

GROUP 96

RECTIFYING APPARATUS

- Class 496. Rotating commutators.
- Class 497. Electric valves (including mercury rectifiers).
- Class 498. Vibrating commutators.

GROUP 97

LUMINOUS APPARATUS (Sources of Light)

- Class 499. Arc lamps, all types.
- Class 500. Incandescent lamps, all types.
- Class 501. Vapor lamps, all types.
- Class 502. Vacuum lamps, all types.

GROUP 98

MEASURING, INDICATING AND RECORDING APPARATUS

(Not including instruments for pure science and research work.)

- Class 503. Instruments for switchboard use.
- Class 504. Instruments for mounting apart from switchboard.
- Class 505. Portable instruments.
- Class 506. Laboratory instruments.

GROUP 99

**APPARATUS FOR PROTECTION OF ELECTRIC APPARATUS AND FOR
CONTROL AND DISTRIBUTION OF ELECTRIC ENERGY, OTHER
THAN RAILWAY MATERIAL**

- Class 507. Complete switchboards.
- Class 508. Lightning arrestors and accessories.
- Class 509. Devices for opening and closing circuits and controlling flow of current therein.

NOTE: In class 509 will be placed such devices as are used in stations and on main circuits.

Class 510. Devices and material used in distribution of current and control of distribution circuits other than in stations and on main circuits; including fuses and fuse holders, conduits, cables, wires, insulators, junction boxes, cabinets, cut-outs, sockets, fixtures, electric sign mechanism, and other subsidiary apparatus not otherwise classified. (See Class 308.)

Class 510½. Electrical workers' tools and appliances.

GROUP 100

ELECTRO-CHEMICAL APPARATUS

Class 511. Storage batteries.

Class 512. Primary batteries.

TRANSPORTATION

DEPARTMENT G

GROUP 101

CARRIAGES AND WHEELWRIGHTS' WORK, AUTOMOBILES AND CYCLES

- Class 513. Pleasure carriages and sleighs, sedan chairs.
- Class 514. Public carriages; ambulances; hearses; carriages for invalids and infants.
- Class 515. Carts and wagons for all purposes; trucks and drays, farm wagons and carts.
- Class 516. Vehicles driven by mechanical motors; motoreycles; automobiles.
- Class 517. Bicycles. Velocipedes.
- Class 518. Detached parts, material and inventions pertaining to carriage building, wheelwrights' work, automobiles or cycles.

GROUP 102

SADDLERY AND HARNESS

- Class 519. Equipment for horses and other animals, attached to carriages, mounted, or in the stable. Harness for pleasure carriages, saddles, bridles; harness for public service or for draught. Parts of harness, materials and inventions pertaining to saddlery and harness making. Military equipment.

GROUP 103

RAILWAYS

- Class 520. Way and structures of railways. Means and methods of construction; grading; ballast, ties, rails and other track materials; grades and change of alignment; bank protection; removal of and protection from snow, ice and sand; tunnels; bridges; trestles; culverts; crossings; fences, cattle guards and signs; signals and interlocking plants; telegraph and telephone plants as applied to railways; buildings, fixtures and grounds; docks and wharves; roadway tools and supplies; steam shovels, wrecking derricks and other work equipment. (See also Class 466.)
- Class 521. Railway equipment. Steam and electric locomotives; passenger-train cars; freight-train cars; electric equipment of cars; building and repair shop equipment. Locomotive cranes.
- Class 522. Railway traffic. Handling of passengers, ticket offices, tickets, baggage handling; industrial, immigration and colonization bureaus. Handling of freight, tariffs, way-bills, means of weigh-

ing; fast freight traffic methods. Literature, lectures, photographic work, advertising, and other methods of promoting traffic.

- Class 523. Railway transportation. Time tables; methods of despatching trains; operation of depots, stations and freight houses; weighing and car-service associations; operation of stock yards, grain elevators, coal and ore docks; operation of yards and engine houses, fuel and water supply; lubricants; operation of trains, including trainmen's signals; cleaning, heating, lighting, ventilating, icing and watering, refrigeration and pre-cooling of cars; drawbridge operation; operation of floating equipment; express and special service; loss of and damage to freight, baggage, property, or stock on right of way; methods for preventing injuries to persons and insuring safety. Apparatus and methods of testing the power and efficiency of locomotives and other railway equipment.
- Class 524. Street railways. Urban and interurban railways for freight or passenger traffic; elevated and subway railways; rack, cable, mono-rail and aerial railways; equipment for these, including track and equipment, motive power, rolling stock, and equipment and methods employed in their operation.
- Class 525. Special methods of transportation, similar to railways. Transportation of ships over railways. Trackless trolley lines. Moving platforms. Scenic and gravity railways for amusement parks.
- Class 526. General. Bibliography, statistics, history, special maps and drawings, and various publications relative to railways. Joint track, detour, and other agreements. Organization, law, insurance, hospitals, club houses, libraries, railroad Y. M. C. A., relief department, pensions, with reference to railways.

GROUP 104

MATERIAL AND EQUIPMENT USED IN THE MERCANTILE MARINE

- Class 527. Raw material and material specially used in the construction and fitting out of ships and boats.
- Class 528. Special tools and implements used in ship-building yards.
- Class 529. Drawings and models of all kinds of vessels or boats for navigating seas and rivers. Illustrations showing the arrangement of such vessels or boats. Drawings and models of tugs and tow boats. Launches and small craft propelled by machinery, by wind, or by oars.
- Class 530. Motive power for vessels and boats (drawings, models and specimens.) Boilers, water heaters, filters for feed water; engines, condensers, propellers, machinery auxiliary to main engines, pumps, governors, indicators of speed and direction, engine counters, and other machinery specifically for the propulsion of vessels. Arrangement for the prevention of fires in holds, storerooms and passages. (See Class 462.)

- Class 531. Marine equipment: winches, tackle blocks, chains, anchors, hawsers, cables, etc. Steering apparatus, order transmitters, machinery for working sails, ship's lights and signals, fresh water evaporators and condensers, apparatus for lighting, heating, supplying air and ventilation. Special apparatus for the generation and use of electricity, refrigerating apparatus, special instruments for determining position and time, flags, furniture, etc. Equipment for loading and unloading merchandise. (See also Class 467.)
- Class 532. Light houses and equipment; buoys, beacons, ranges and other aids to navigation. Application of electric lighting to navigation.
- Class 533. Pleasure craft; yachts, steam, sail or power boats, row boats, outriggers, skiffs, etc., and their accessories (drawings, models and specimens.)
- Class 534. Submarine navigation.
- Class 535. Equipment for saving of lives and vessels at sea, boats, line carriers, lines, traversers, safety belts and jackets, etc. Humane societies. Spreading of oil upon the sea. Equipment for raising wreckage, and for submarine operations for saving sunken material.
- Class 536. Swimming: apparatus and equipment for swimmers or swimming instruction.
- Class 537. Statistics, special charts and publications relative to navigation for commerce or for pleasure.

GROUP 105

- Class 538. Models, or copies thereof, of early English, Spanish and French vessels; pictures, documents and original items illustrating their voyages.

GROUP 106

MATERIAL AND EQUIPMENT OF NAVAL SERVICES; NAVAL AND MILITARY ORDNANCE

- Class 539. Models, designs, drawings, descriptions, specifications, photographs, paintings, of warships and public vessels of special character.
- Class 540. Material used in the construction and fitting out of ships-of-war and public craft; deck and engine-room outfits; signal gear; naval furniture; electrical equipment installed with reference to battle conditions; safety appliances.
- Class 541. Motive power for government vessels.
- Class 542. Marine and military arms and armaments, ordnance, and their equipments; telescopic sights, range finders, shop plotters, etc.; torpedoes, fixed, dirigible, and automobile; naval signals.

AERIAL NAVIGATION

GROUP 107

DIRIGIBLES

- Class 543. Construction: fabrics, cars, dirigibles, war cruisers and touring cruisers, anchors, grapnels, valves, netting, screw-propellers, etc.

GROUP 108

SPHERICAL BALLOONS

- Class 544. Construction: fabrics (cotton or silk, rubberized); cars; netting, cordage, balloons for the study of the atmosphere and for making scientific observations of air currents, clouds, temperature at great heights, optical phenomena, etc.
- Class 545. Statosopes, thermometers, anemometers, tachometers, recording barometers.

GROUP 109

MILITARY BALLOONING

- Class 546. Military balloons, captive and free, and their accessories; winding drums; transport wagons; apparatus for inflation; scientific instruments, etc.

GROUP 110

AEROPLANES

- Class 547. Monoplanes; biplanes; triplanes; military aeroplanes; frames; parachutes. Screw propellers, aeroplane carriages, speedometers, steering wheels, reservoirs, cables, compasses, buffers, stabilizers, rigging screws, clothing for aviators; toys, kites, etc.
- Class 548. Hydro-aeroplanes.

GROUP 111

GASES

- Class 549. Generation and preservation of hydrogen and other light gases for balloon use.

GROUP 112

MOTORS

- Class 550. Motors for dirigibles and aeroplanes; carbureters; magnetos, etc.

GROUP 113

LITERATURE

- Class 551. Drawings, maps of journeys; diagrams; photographs, etc.

AGRICULTURE

DEPARTMENT H

GROUP 114

FARM EQUIPMENT AND METHODS OF IMPROVING LANDS

- Class 552. Specimens of various systems of farming.
- Class 553. Plans and models of farm buildings; general arrangement of stables, sheep-folds, barns, pig-sties, poultry-houses, breeding-grounds; special arrangements for breeding and fattening cattle; granaries and silos; furniture for stables, barns, kennels, etc.
- Class 554. Material and appliances used in agricultural engineering; reclaiming of marshes; drainage; irrigation. (See Class 462.)

GROUP 115

AGRICULTURAL IMPLEMENTS AND FARM MACHINERY

- Class 555. Implements, machines and appliances for agricultural preparation: machetas, axes, mattocks, grubbing hoes, spades, shovels, hand plows, etc.; walking plows, sulky plows, gang plows, etc.; rakes, rollers, harrows, clod crushers, etc.; stalk cutters, stalk rakes; stump pullers; manure spreaders.
- Class 556. Implements, machines and appliances for seeding; corn planters, seed drills, cotton planters, grain drills, broadcast seeders, etc.
- Class 557. Implements, machines and appliances for cultivation: hoes, cultivators, riding cultivators, cultivators propelled by steam or electricity.
- Class 558. Implements, machines and appliances for harvesting: sickles, scythes, grain cradles, reapers, binder twine, headers, mowers, corn harvesters, potato diggers, combined reapers and threshers propelled by animals, by steam or by electricity; machines and implements for threshing and cleaning, fanning mills, threshers and separators, clover hullers, corn shellers, threshers and separators with stationary or traction engines; wind stackers; fodder shock compressors, bunchers, etc.
- Class 559. Miscellaneous: farm wagons and farm carts; feed cutters, feed grinders, cider mills, machines for ginning and baling cotton, hay baling machinery; horse clipping machines; sheep shearing machines; wind mills, tanks, pumps and other water lifting apparatus for agricultural uses; machines for use on farms for grinding, weighing, etc. (See Class 462.)
- Class 560. Portable agricultural power generating machines; engines, horse powers, agricultural machinery moved by animals, water, air, or electricity. Internal combustion motors for agricultural purposes. Motor driven farm trucks and wagons.
- Class 561. Apparatus for preparing food for animals. Stock foods.

GROUP 116

FERTILIZERS

- Class 562. Preparing and preservation of manures. Commercial fertilizers. Use of sewage.

GROUP 117

TOBACCO

(Equipment, Processes and Products.)

- Class 563. Tobacco culture; raw material in stalk, leaf and seed.
Class 564. Equipment for manufacture. Construction of tobacco factories.
Class 565. Laboratory appliances.
Class 566. Manufactured products.

GROUP 118

APPLIANCES AND METHODS USED IN AGRICULTURAL INDUSTRIES

- Class 567. Types of agricultural factories connected with farming: dairies; creameries; cheese factories; etc.
Class 568. Oil mills; margarin factories. Grain elevators and appliances.
Class 569. Workshops for the preparation of textile fibers.
Class 570. Equipment for the breeding of birds and for the artificial hatching, raising or fattening of poultry. Poultry foods. Methods of and appliances for packing and transporting.
Class 571. Market gardening. Buildings and appliances for growing, gathering, packing and marketing vegetables. Processes and equipment employed in the forced culture of vegetables and plants, with specimens of products.

GROUP 119

THEORY OF AGRICULTURE AND AGRICULTURAL STATISTICS

- Class 572. Studies relating to soil and water from an agricultural point of view.
Class 573. Agronomic charts, climate charts, various agricultural charts. Registers of land tenures.
Class 574. Rural population. Division of cultivated territory. Yield and returns. Census of farm animals.
Class 575. Progress, especially since 1905. History of agriculture in its successive changes. History of fluctuations in prices of land, rents, labor, live stock, crops and animal products.
Class 576. Institutions for the promotion and advancement of agriculture. Methods and products of experiment stations and laboratories. Societies, agricultural communities and associations. Loans on land. Agricultural insurance.

Class 577. Legislative and administrative measures.

Class 578. Books, papers, statistics, diagrams, periodical publications.

GROUP 120

VEGETABLE FOOD PRODUCTS AND AGRICULTURAL SEEDS

Class 579. Cereals: wheat, rye, barley, maize, millet, oats, rice, buckwheat and other cereals in sheaves or in grain.

Class 580. Legumes and their seeds: beans, peas, lentils, etc.

Class 581. Tubers and roots and their seeds: potatoes, beets, carrots, turnips, radishes, etc.

Class 582. Miscellaneous vegetables and their seeds: cabbages, peppers, artichokes, mushrooms, cresses, etc.

Class 583. Sugar producing plants and their products: beets, cane, sorghum, etc.

Class 584. Miscellaneous plants and their products: coffee, tea, cocoa, etc.

Class 585. Oil producing plants and their products.

Class 586. Forage, growing, green, cured or in silos; fodder for cattle; forage, grass and field seeds.

GROUP 121

APPLIANCES FOR GATHERING WILD CROPS AND PRODUCTS OBTAINED

Class 587. Methods and implements for gathering the products of the soil obtained without culture.

Class 588. Mushrooms; truffles; edible wild fruits.

Class 589. Plants, roots, barks, leaves, fruits obtained without cultivation and used by herbalists, in pharmacy, for dyeing, manufacture of paper, oils, or for other purposes.

Class 590. India rubber; gutta percha. Gums and resins.

GROUP 122

ANIMAL FOOD PRODUCTS

Class 591. Refrigerated fresh meats, poultry, game and fish; edible animal fats and oils, gelatines.

Class 592. Milk and cream, fresh or condensed; sterilized milk.

Class 593. Butter in all forms.

Class 594. Cheese in all forms.

Class 595. Eggs; albuminoid foods and preparations.

Class 596. Dairy fittings and appliances, churns, butter workers, cans, pails, cheese presses, vats, separators, testers, pasteurizers, etc., including all fittings and appliances for the preparation, preservation, transportation, distribution and delivery of milk for the supply of cities and towns.

GROUP 123

EQUIPMENT AND METHODS EMPLOYED IN THE PREPARATION OF FOODS AND BEVERAGES

- Class 597. Flour mills. Factories for the production of glucose and starch.
- Class 598. Manufacture of food pastes.
- Class 599. Bakeries: kneading machines, mechanical ovens; manufacture of ship biscuit.
- Class 600. Pastry works.
- Class 601. Methods and appliances for the utilization of refrigeration in food preservation. Refrigerators and household refrigerating machines. (See Class 467.)
- Class 602. Equipment and methods used for preserving fresh meats, game, fish, etc.
- Class 603. Factories for canning or curing meat, fish, vegetables and fruit.
- Class 604. Sugar manufactories and refineries.
- Class 605. Manufacture of chocolate and confectioneries.
- Class 606. Preparation of ices and sherbets.
- Class 607. Decortication and roasting of coffee, peanuts, etc.
- Class 608. Vinegar or pickling works.
- Class 609. Distilleries; distillers' machinery and supplies.
- Class 610. Wineries; methods and equipment employed in wine making; wine ferments; wine blending; wine preservatives.
- Class 611. Breweries; brewers' machinery and supplies, etc.
- Class 612. Manufacture of aerated waters; bottling works and machinery.
- Class 613. Various industries for the preparation of foods.
- Class 614. Olive oil presses and clarifying apparatus.

GROUP 124

FARINACEOUS PRODUCTS AND THEIR DERIVATIVES

- Class 615. Flour from cereals; grain from which the hulls have been removed, groats, potato starch, rice flour, flour from lentils or beans, gluten; prepared cereals.
- Class 616. Tapioca, sago, arrowroot, various starches, malt. Mixed farinaceous products.
- Class 617. Italian pastes: semolina, vermicelli, macaroni, noodles. Home-made pastes.
- Class 618. Infants' and invalids' foods.

GROUP 125

BREAD AND PASTRY

- Class 619. Breads, with or without yeast, fancy breads and breads in moulds, compressed breads for travelers, military campaigns, etc. Ship biscuits. Yeasts. Baking powders.
- Class 620. Pastry of various kinds peculiar to each country. Ginger bread and dry cakes for keeping.

GROUP 126

PRESERVED MEAT, FISH AND VEGETABLES

- Class 621. Meat preserved by any process. Salted meats, canned meats. Meat and soup tablets. Meat extracts, soups. Various pork products.
- Class 622. Fish preserved by any process. Salt fish, fish in barrels, cod, herring, etc. Fish preserved in oil; tunny, sardines, anchovies. Fish products; oil, roes, isinglass, spermaceti, etc.
- Class 623. Canned lobster, canned oysters, canned shrimp, canned turtle, canned terrapin.
- Class 624. Vegetables preserved by various processes.
- Class 625. Army and navy commissary stores and equipment.

GROUP 127

SUGAR AND CONFECTIONERY, CONDIMENTS AND RELISHES; NUT AND FRUIT FOODS.

- Class 626. Sugar. Glucose. Syrups.
- Class 627. Confectionery. Chocolate. Glacé fruits.
- Class 628. Foods made from nuts or fruits.
- Class 629. Coffee, tea, substitutes for coffee; mate, chicory and sweet acorns.
- Class 630. Vinegar.
- Class 631. Table salt.
- Class 632. Spices and their derivatives: pepper, cinnamon, allspice, flavouring extracts.
- Class 633. Mixed condiments and relishes: pickles, mustard, curries, sauces.

GROUP 128

WATERS AND UNFERMENTED FRUIT JUICES

- Class 634. Artificially aerated, carbonated or mineral waters, ginger ale, and other non-alcoholic beverages. Soda fountains, carbonating machinery, apparatus and fixtures; filters and methods of purifying water for home use.
- Class 635. Cider and other unfermented fruit juices.

GROUP 129

WINES AND BRANDIES

- Class 636. Dry wines, red and white.
- Class 637. Sweet wines: sherry, madeira, port, angelica, etc.
- Class 638. Sparkling wines.
- Class 639. Brandies.
- Class 640. Grape juice, fermented.

GROUP 130

SYRUPS AND LIQUORS, DISTILLED SPIRITS AND COMMERCIAL ALCOHOL

- Class 641. Syrups and sweet liqueurs: anisette, curacao, ratafia, benedictine, chartreuse, etc.
- Class 642. Aperients having alcohol or wine as a base: absinthe, bitters; vermouth, myrrh, etc.
- Class 643. Commercial alcohols: alcohol made from beets, molasses, grains, potatoes, etc.
- Class 644. Various distilled spirits, whiskey, gin, rum, vodka, kirschwasser, saké, etc.

GROUP 131

FERMENTED BEVERAGES

- Class 645. Cider and perry. Ale, beer, porter and other malt liquors. Pulke. Koumiss and other fermented drinks low in alcohol.

GROUP 132

INEDIBLE AGRICULTURAL PRODUCTS

- Class 646. Textile plants: cotton; flax and hemp in the straw, scutched or unscutched; ramie, phormium, tenax, vegetable fibers of all kinds.
- Class 647. Oil producing plants, in stalk or in seed.
- Class 648. Non-edible vegetable fats and oils.
- Class 649. Plants containing tannin, weeds and noxious plants.
- Class 650. Plants containing dyes, medicinal plants.
- Class 651. Hops, teasels, broomcorn, etc.
- Class 652. Wool, raw, washed or unwashed.
- Class 653. Packing house by-products.
- Class 654. Feathers, down, hair and bristles, etc.

GROUP 133

USEFUL INSECTS AND THEIR PRODUCTS, INJURIOUS INSECTS AND PLANT DISEASES

- Class 655. Systematic collections of useful and injurious insects.
- Class 656. Systematic collections of vegetable parasites from plants and animals.
- Class 657. Bees. Silkworms and other bombycids. Cochineal insects.
- Class 658. Appliances for rearing and keeping bees and silk worms. Bee and silkworm products; honey, wax, cocoons.
- Class 659. Appliances and processes for destroying plant diseases and injurious insects.

FORESTRY

- Class 660. Forest geography: maps, statistics and general literature. Geographical distribution of forests, of forest types and tree species. Botanical collections: seeds, bark, foliage, flowers, fruit, bark and wood sections.
- Class 661. Planting: equipment and processes for tree collection; nursery practice, field planting and field sowing.
- Class 662. Management and utilization; equipment and processes for protection from fire, insects and disease; organization of protective forces, ranger stations, trail and telephone systems. Logging methods and equipment: transportation of logs; systems of cutting.
- Class 663. Indirect uses of forests: watershed protection; effect on climate and public health; prevention of erosion and shifting sand; use for windbreaks, for recreation purposes and as refuge for game.

GROUP 135

FOREST PRODUCTS

- Class 664. Lumber: equipment and processes used in cutting logs into lumber; drying, dressing and grading of lumber. Lumber grading rules.
- Class 665. Saw-mill and planing-mill products from re-manufacture of lumber: furniture woods, wagon stock, cooperage, boxes, pickets, shingles, doors, etc. Veneering and veneer-cutting machinery.
- Class 666. Forest by-products: tan bark and extract, naval stores, oils and distillates, charecoal, cork, dye woods, medicinal and textile barks, kiln dried wood, wood fuels, wood wool.

LIVE STOCK

DEPARTMENT I

GROUP 136

HORSES AND MULES

- Class 667. Draft horses.
- Class 668. Coach horses.
- Class 669. Carriage horses.
- Class 670. Trotting horses.
- Class 671. Thoroughbred horses.
- Class 672. Saddle horses.
- Class 673. Hunters.
- Class 674. Ponies.
- Class 675. Jacks and jennets.
- Class 676. Mules.
- Class 677. Methods of raising, breeding and working. Literature, statistics and history of the industry.

GROUP 137

CATTLE

- Class 678. Beef cattle.
- Class 679. Dairy cattle.
- Class 680. Methods of raising, feeding, milking, fattening and breeding; statistics; literature and history of the industry.

GROUP 138

SHEEP

- Class 681. Fine woolled sheep.
- Class 682. Combing woolled sheep.
- Class 683. Middle woolled sheep.
- Class 684. Mutton sheep; sheep of breeds not otherwise provided for.
- Class 685. Methods of raising, feeding, fattening, breeding and shearing; statistics; literature and history of the industry.

GROUP 139

GOATS, ETC.

- Class 686. Goats. Other unclassified domesticated animals.
- Class 687. Methods of raising, feeding, breeding and fattening; statistics; literature and history of the industry.

GROUP 140

SWINE

- Class 688. Swine of all breeds.
Class 689. Methods of raising, feeding, breeding and fattening, statistics; literature and the history of the industry.

GROUP 141

DOGS

- Class 690. Dogs of all breeds; hunting, coursing, coach, watch, pet, etc.
Class 691. Breeding kennels, bench shows; registers, standards and literature; methods of breeding and raising.

GROUP 142

CATS, PET STOCK, ETC.

- Class 692. All breeds of the domestic cat.
Class 693. Cavies and their uses.
Class 694. Rabbits and methods of raising; their use as food; their destruction as pests.

GROUP 143

POULTRY AND BIRDS

- Class 695. Poultry of all breeds including turkeys and all domesticated birds not otherwise specified.
Class 696. Ducks, geese, swans and other water fowl.
Class 697. Pigeons; homing pigeons; pigeon lofts.
Class 698. Guinea fowl, pea fowl, ostriches, pheasants.
Class 699. Poultry and bird houses, and their fittings; poultry shows; standards of perfection; poultry foods; literature; prices; statistics, methods of breeding and raising.

HORTICULTURE

DEPARTMENT K

GROUP 144

APPLIANCES AND METHODS OF POMOLOGY, FLORICULTURE AND ARBORICULTURE

- Class 700. Horticultural tools; methods and appliances for gathering, packing and transporting produce; pruning and grafting knives, ladders; tree diggers; watering apparatus; spraying apparatus and insecticides.
- Class 701. Frost-fighting principles, methods and devices; apparatus for preventing injury by frost; methods of de-frosting or thawing. Orchard heaters; heaters and vaporizers; heaters and covers.
- Class 702. Apparatus and objects for ornamenting gardens; vases, pots, chairs, seats, fountains, labels, etc.
- Class 703. Glass houses and their accessories; heating apparatus, mattings, etc.
- Class 704. Aquariums for plants. Ferneries, etc., for use in dwellings.
- Class 705. Garden architecture and landscape gardening; plans, drawings, models, books, pictures, etc.

GROUP 145

APPLIANCE AND METHODS OF VITICULTURE

- Class 706. Types of buildings used in connection with vine culture.
- Class 707. Methods of picking, packing and transporting fresh grapes.
- Class 708. Raisin growing; methods of curing, packing, grading, etc.

GROUP 146

POMOLOGY

- Class 709. Pomaceous and stone fruits: apples, pears, quinces, peaches, apricots, plums, nectarines, cherries, grapes, etc.
- Class 710. Citrus fruits: oranges, lemons, limes, shaddocks, pomelos, etc.
- Class 711. Tropical and semi-tropical fruits: pineapples, avocados, bananas, guavas, mangoes, tamarinds, figs, olives, sapodillas, etc.
- Class 712. Small fruits: strawberries, raspberries, blackberries, dewberries, gooseberries, currants, etc.
- Class 713. Fruits matured in frost districts under frost protecting appliances.
- Class 714. Nuts: walnuts, almonds, chestnuts, filberts, pecans, hickorynuts, etc.
- Class 715. Casts and models of fruits in wax, plaster, etc. Photographs, publications and monographs. Labels for canned or preserved fruits.

GROUP 147

PRESERVED, DRIED AND PICKLED FRUITS

- Class 716. Fruits, dried or prepared: prunes, figs, raisins, peaches, apricots, dates, etc.
- Class 717. Fruits, canned, in tins or in glass. Fruits preserved without sugar.
- Class 718. Pickled fruits. Brandied fruits. Preserves, jellies and jams.
- Class 719. Processed fruits.
- Class 720. Olives: green, ripe, pickled and dried. Olive oil.
- Class 721. Equipment for and processes of canning fruit. Canning factories.

GROUP 148

FRUIT CULTURE.

- Class 722. Collections of fruit trees and vines. Methods of propagating, packing, shipping, planting, growing, training, pruning, etc.
- Class 723. Plants of small fruits: strawberries, raspberries, blackberries, gooseberries, etc. Methods of propagating, growing, transplanting, training, packing, shipping, etc.
- Class 724. Methods of cross-fertilization of fruits and nuts.
- Class 725. Exhibits of insect pests and diseases of fruit trees, vines and plants, and modern appliances for their eradication. Advantages in the use of predaceous and parasitic insects.

GROUP 149

TREES, SHRUBS, ORNAMENTAL PLANTS AND FLOWERS

- Class 726. Ornamental trees, seedlings or grafted. Methods of propagating, packing, shipping, planting, growing, training, grafting, pruning, etc.
- Class 727. Ornamental shrubs, deciduous and evergreen. Methods of propagating, packing, shipping, planting, growing, training, grafting, pruning, etc.
- Class 728. Flowering plants for the park or garden. Bulbous plants. Herbaceous plants grown in open ground. Botanical specimens.
- Class 729. Plants for the conservatory, ornamental and flowering. Hot-house plants and those grown in houses of moderate temperature.
- Class 730. Specimens of culture used in different countries for use or for ornament.
- Class 731. Forced culture of fruits; specimens and processes.
- Class 732. Insect pests, fungus diseases and parasitic growths affecting ornamental trees and plants; natural and artificial methods of combating them.
- Class 733. Masses and baskets of flowers. Bouquets of natural flowers. Wax or other imitations of plants, leaves or flowers. Florists' supplies.

GROUP 150

SEEDS, BULBS, CUTTINGS AND PLANTS FOR PROPAGATING

- Class 734. Collections of seeds of flowers, plants and trees.
- Class 735. Collections of bulbs for planting.
- Class 736. Collections of cuttings or young plants for grafting. Nursery stock. Methods of packing and shipping.
- Class 737. Flowers and plants grown for perfumes, extracts, and medicinal uses.

GROUP 151

THEORY OF HORTICULTURE AND HORTICULTURAL STATISTICS

- Class 738. Charts or diagrams showing the comparative area occupied by fruit industries in states and countries. Charts or diagrams illustrating progress of organization among fruit growers for promotion of their industry by improved packing and marketing methods.
- Class 739. Charts showing moisture requirements of different fruits supplied by rainfall or irrigation, or by both. Charts or diagrams showing the period of ripening of different fruits in any state and country. Charts and names and time of market suitability of varieties of each fruit commercially grown in any state or country. Charts showing rainfall, sunshine and wind movements as affecting the character and yield of fruit.
- Class 740. Graphic representations of the history and work of state and national horticultural societies, including publications thereof.
- Class 741. Charts showing districts where frost protection will benefit growers.
- Class 742. Treatises on international, national and interstate fruit and fruit tree quarantine. Charts showing quarantine passports, tags, certificates, etc.

MINES AND METALLURGY

DEPARTMENT L

GROUP 152

WORKING OF MINES, ORE BEDS AND STONE QUARRIES

(Equipment and Processes.)

- Class 743. Equipment and methods of geological surveys, mining bureaus, societies and other institutions for the promotion of mining. Instruments and equipment for surface and underground surveys and examinations in connection with mining.
- Class 744. Equipment and methods of prospecting for mineral veins and deposits, for building stones, coal, petroleum, natural gas, artesian waters, etc.
- Class 745. Equipment and methods for sampling, assaying, analyzing or testing ores, metals and other minerals and mineral products.
- Class 746. Equipment and methods for drilling, cutting or otherwise breaking down rock, ore, or other mineral in quarries, open cuts or mines; sinking shafts, opening galleries, drifts or tunnels.
- Class 747. Explosives and methods for storing, handling, thawing, placing and firing the same, in mines, quarries and deep wells; different classes of explosives, and methods and equipment for testing the same.
- Class 748. Equipment for, and methods of mining coal and other minerals, and of timbering or otherwise securing mine shafts, drifts, rooms, stopes, etc., or tunnels, and of preventing surface subsidence over mines.
- Class 749. Electric, compressed air, or other motors, for use in opening and operating mines and quarries, and for operating equipment for handling ores and other minerals. (See Classes 459 and 464.)
- Class 750. Equipment and methods for the underground handling and transportation of ore, coal, etc., including haulage engines and rope, and locomotives using compressed air, electricity, gasoline, alcohol, etc. (See Class 460.)
- Class 751. Machinery and appliances for draining mines and quarries. (See Class 462.)
- Class 752. Equipment for and methods of ventilating mines.
- Class 753. Equipment for and methods of lighting mines: oils, acetylene, electricity; safety lamps, testing and cleaning lamps; lamps and other appliances for testing mine gases.
- Class 754. Equipment and methods for mine safety; safety appliances and methods, including signals, mine telephones, etc.; safety devices; methods of preventing dust explosions and other accidents; equipment and devices for fighting mine fires; mine laws, rules and regulations in behalf of safety in mines and quarries.

- Class 755. Equipment and methods for mine rescue work, apparatus for artificial respiration, and other appliances; equipment and methods of resuscitating persons overcome by electric shock or by mine gases; equipment and methods in first aid to the injured in mines; equipment and methods in mine sanitation.
- Class 756. Equipment and methods for handling and weighing mine products at the mine, and for their above-surface transportation; tipples, screens, picking tables, etc.; railways, tramways, inclined planes, belt conveyors, loose cables, aerial cables, trolleys, etc.; appliances for loading and unloading wagons, boats, cars, etc.
- Class 757. Machinery, appliances and methods for working gases or minerals in liquid form or in solution, such as petroleum, natural gas, salt, sulphur, etc.; appliances and methods for capping and plugging gas and oil wells; pipe lines, storage facilities, etc.
- Class 758. Equipment and methods used in quarrying stone and other materials requiring similar operations.
- Class 759. Equipment and methods used in excavation, in open-pit and placer mining; steam shovels, dredges, and hydraulic mining equipment; special methods of storing and conveying water, etc. (See Classes 199 and 466.)

GROUP 153

MINERALS AND STONES, AND THEIR UTILIZATION

- Class 760. Systematic collections in geology, general mineralogy, crystallography and paleontology. Collections illustrating the structure, modes of occurrence and origin of ore deposits, and other mineral deposits, with maps showing their distribution.
- Class 761. Building materials: ornamental and building stones, rough hewn, sawed or polished; stones for highway construction and other purposes.
- Class 762. Mechanical appliances and processes used in cutting, sawing, shaping and polishing marble, granite, slate, and other building stone.
- Class 763. Equipment and processes for crushing, separating, washing or drying rocks, clays and other minerals.
- Class 764. Building materials: Rocks which produce lime or cement. Processes and appliances used in the preparation of lime, cement and plaster; their products and uses; artificial stone.
- Class 765. Clays, fuller's earth, kaolin, feldspar, silica sand and rock, quartz and other substances used in the manufacture of earthenware and of building materials such as brick, paving brick, paving and roof tiles, pipe, terra cotta, glass, etc.; processes of utilization with specimens of their products; brick and tile making machinery.
- Class 766. Grindstones, whetstones, pumice stones; other natural and artificial mineral abrasives, including carborundum, alundum, etc.; processes of their manufacture and their use.
- Class 767. Refractory rocks, fire clays and sands. Moulding sands.
- Class 768. Mica, asbestos, meerschaum, fluorspar, graphite (plumbago), gypsum and other non-metallic minerals; processes of utilization with their products.
- Class 769. Gems and precious stones; lapidary work; artificial gem materials and their preparation.

- Class 770. Common salt, nitrates, sulphates, borates, and other natural salts; methods of purification with their products.
- Class 771. Mineral waters; artesian water conditions; utilization of water.
- Class 772. Sulphur and pyrite: process of utilization, with their products.
- Class 773. Mineral and vegetable paints; dye stuffs, pigments, varnishes and fillers; processes of preparation and their products; painting and glazing.
- Class 774. Mineral fertilizers; natural and artificial sources of nitrogen; potash and phosphates; processes of preparation, with their products.
- Class 775. Asphalt and asphaltic rocks; mineral bitumen and wax; amber, jet, etc.; processes for obtaining, treating, refining, and utilizing, and their products.
- Class 776. Mineral fuels and luminants; peat, lignite, bituminous coal, anthracite; coal dust and compressed coal; petroleum and its products; mineral gases. Equipment for crushing, separating, and washing coal. Equipment and processes for briquetting or otherwise compressing fuels; for preparing coke and by-products; for storing, refining, and handling petroleum and natural gas products.
- Class 777. Metallic ores of every kind, and products. Native metals.
- Class 778. Artificial mineral products, their preparation and use.

GROUP 154

MINE MODELS, MAPS, PHOTOGRAPHS

- Class 779. Maps, charts, photographs, and models illustrating geologic or topographical features, and their relation to mineral deposits, or the structure or mode of occurrence of mineral deposits. Mine models, working plans of mines; maps, photographs, lantern slides, moving pictures, etc., of mining operations, plants, camps, etc.

GROUP 155

METALLURGY

- Class 780. Equipment, methods and processes used, and products obtained; (a) in the handling of ores, such as hand sorting, conveying, elevating, weighing, sampling, etc.; (b) in the preparation of ores, such as breaking, crushing, pulverizing, grinding, washing, drying, etc.; (c) in the concentration, separation and classification of ores, such as screens and trommels, jigs, sand and slime separators, slime settling and thickening devices, dry vanners, etc.; water clarifiers, flotation processes with the aid of oil, gas, etc.; magnetic and electrostatic concentration, decrepitation, briquetting, sintering, etc. (See also Class 460.)
- Class 781. Equipment, materials, processes, products and by-products concerned in the treatment of the ores of iron for pig iron; equipment for smelting iron ores; blast furnaces and accessories; furnace construction; appliances used in operating furnaces and in handling and utilizing furnace products. Equipment for measuring furnace temperatures. Equipment and methods in the gen-

eration and use of gases, the preparation and use of liquid and solid fuels, generation, drying and heating of blast; handling and use of slags; recovery, use of and injuries from dust, fumes, etc. Varieties of pig iron.

- Class 782. Equipment, methods and products of the manufacture and use of refractory materials for metallurgical purposes (bricks, blocks, crucibles, retorts, etc.)
- Class 783. Equipment, materials, processes and products concerned in the manufacture of Bessemer, open hearth, crucible and electrically-refined steel; ingots, billets, blooms, slabs, steel castings and other semi-finished material; re-heating furnaces, hammers, presses and rolls used in shaping these. Various processes of manufacturing iron or steel directly from the ores, such as electric smelting and refining, etc.
- Class 784. Equipment, materials, processes and products concerned in the manufacture of special and alloy steels, including the preparation of manganese, chromium, nickel, vanadium, tungsten and other metals used therein.
- Class 785. Equipment, materials, processes and products concerned in producing and refining wrought iron.
- Class 786. Equipment, methods and processes in the manufacture of iron and steel in finished commercial forms, such as merchant bar, hoop iron, band iron, bars for wire drawing, iron and steel wire; iron and steel of standard or special sections, armor plates, sheet iron and sheet steel for commercial building, metallurgical and other purposes; rails, axles, tires, wheels, large forgings, gun barrels, projectiles, ordnance equipment, other than naval, and its production.
- Class 787. Equipment, processes and products in the manufacture of welded and seamless metal pipes and tubes, other than cast iron pipes.
- Class 788. Metal plates and screens, flanged, stamped, cut, decorated and perforated, and their production. Production and use in metallurgical operations of wire cloth and screens.
- Class 789. General foundry equipment. Foundry processes and products.
- Class 790. Equipment, materials, and processes used in the metallurgy of copper, and products obtained. Treatment of ores, production of copper and copper alloys, bronze and brass, in ingots, bars, sheets, wire and other forms. Electrolytic and other processes used in refining copper, and in separating the accompanying gold, silver, and other substances.
- Class 791. Equipment, materials and processes used in the metallurgy of gold and silver, including amalgamation, hydrometallurgy, etc., and products obtained. Treatment of the ores: retorting amalgam, refining precipitates and electrolytic slimes; parting of gold and silver; melting, refining, stamping and shipping bullion. Gold and silver in bars and other forms.
- Class 792. Equipment, materials, and processes used in the metallurgy of lead, and products obtained; treatment of ores, including blast roast-

ing, sintering, briquetting, smelting, etc.; refining of lead bullion and the separation of the associated gold and silver. Production of lead in commercial forms, pig, bars, sheets, pipes, shot and test lead; lead alloys; white lead and other lead pigments.

- Class 793. Equipment, materials, and processes used in the metallurgy of zinc, cadmium and mercury, and their alloys, zinc spelter, metallic zinc in bars and sheets, and zinc white; treatment of galvanizer's dross and zinc skimmings.
- Class 794. Equipment, materials, and processes used in the metallurgy of aluminum, sodium, calcium, magnesium, and their alloys, and other metals or alloys produced or refined by electro-metallurgical processes and not otherwise provided for.
- Class 795. Equipment, materials, and processes used in the metallurgy of arsenic, antimony, tin, nickel, platinum and other metals not otherwise provided for, and their alloys, such as German silver and monel metal.
- Class 796. Equipment for and processes of recovering and treating gold and silver and other metal waste in the working of these metals, and dust from refiners of precious metals. Appliances, processes, and products for exact rolling, beating and grinding of gold, silver, aluminum, zinc, lead, tin, and other metals and alloys. Apparatus and processes for working platinum and other rare metals.
- Class 797. Equipment, processes and products of electricity applied to the production and refining of metals and other mineral products not otherwise classified; electroplating; electric and other methods of welding; electrotyping; and other applications of electricity in metallurgy not otherwise provided for.
- Class 798. Apparatus and processes (other than electro-metallurgical) for coating metals with more precious, more malleable or more durable metals; case hardening; malleableizing; galvanizing or sherardizing of metals, leading or nickel plating; tin plates (bright, dull, mottled, ornamental, printed) and tin plating.
- Class 799. Appliances and processes for enameling metallic objects, and products, and other metal coating or protection not otherwise provided for.

GROUP 156

LITERATURE OF MINING AND METALLURGY

- Class 800. Statistics and publications relative to geology, mineralogy, paleontology, topography, quarrying, mining, mine accidents, metallurgy, the manipulation of mineral products and the development of water resources.



CLASSIFICATION INDEX

A	CLASS		CLASS
Abrasive materials	766	Alundum	766
Absinthe	642	Amber	235, 273, 775
Academies for secondary education	13	Ambulances	514
Accidents, appliances for aid in	144, 145	Ambulance service	144
Accidents, industrial	67	Ammunition	265, 542
Accidents, prevention of in mines	754	Anatomical appliances and instruments	135
Accidents (see also Life saving)		Anatomical models	135
Accumulators, hydraulic	470	Anchors	531
Acetylene gas, storage of	169	Anemometers	349, 545
Acetylene lighting, methods and appliances		Animal fats, edible	591
for	357, 753	Animal food products	Group 122
Acid, acetic	156	Animal oils	591
Acids	161	Animal products, fluctuation in price	575
Adding machines	133	Animal shoes	289
Addressing machines	100	Animal substances, chemical treating apparatus	150
Adulteration of drugs	164	Annealing, equipment for	471
Adults, care of destitute	78	Annunciators, electric	189
Advertising methods	103	Antimony	795
Aerated waters	634	Appliances,	
Aerated waters, manufacture of	612	safety	214, 448, 472, 476, 523, 540, 754
Aerial navigation	Groups 107 to 113	Apparatus, see also Equipment, Imple-	
Aeroplanes and equipment	547, 548	ments, Instruments, Machinery, Tools	
Aeroplane motors	550	and Supplies	
Agricultural books and diagrams	578	Appliances, see also Equipment, Imple-	
Agricultural clubs for boys and girls	23	ments, Instruments, Machinery, Tools	
Agricultural education	23	and Supplies	
Agricultural engineering	554	Aquariums, plant	704
Agricultural experiment stations	24, 576	Arboriculture	Group 144
Agricultural history and progress	575	Architects instruments	219
Agricultural implements	Group 115	Architectural details	Group 42
Agricultural industries	Group 118	Architectural engineering	Group 43
Agricultural legislative and administrative measures	577	Architecture	Group 42
Agricultural machines for supplying power	560	Architecture, garden	705
Agricultural periodicals and publications	578	Area maps showing fruit industry	738
Agricultural preparation	555	Area maps showing location of minerals	760
Agricultural products, inedible	Group 132	Armor plates	786
Agricultural schools and institutions	23, 576	Arms, military and naval	542
Agricultural seeds	Group 120	Arms, sportsmen's	265
Agricultural societies, etc.	72, 576	Army commissary stores and equipment	625
Agricultural statistics	Group 119	Army engineering materials	197
AGRICULTURE	Department H	Army medical and surgical outfit, special	144
Agriculture, theory of	Group 119	Arsenic, metallurgy and products of	795
Aid for discharged prisoners	85	Artesian water conditions	771
Aid to drowning persons, appliances for	145	Artesian water, prospecting for	744
Aid to injured in mines	755	Artichokes	582
Aid to wounded in battle	144	Art institutes	21
Aids to navigation	115, 532	Art paper	121
Air compressors	464, 749	Articles, fancy	257
Air lifts (for liquids)	462	Artificial eyes	143
Air motors for mines	749	Artificial fabrics, manufacture of	158
Air pumps (condensers)	454	Artificial flowers	439
Albuminoid foods	595	Artificial limbs	143
Alcohol	643	Artificial stone and its production	764
Alcohol, effects and regulation	Group 18	Artists' materials	219
Alcohol, for lighting	357	Asbestos	768
Alcohol, modified for industrial purposes	168	Ash handling apparatus and systems	450
Alcohol, wood	156	Ash sifters	352
Ale	645	Asphalt	775
Ale, ginger	634	Asphyxiation, appliances for aid in	145
Alkalies	161	Assaying	755
Alloy, steel (see Steel)		Associations, horticultural	740, 742
Alloys, copper	790	Associations, scientific	37
Alloys, lead	792	Associations (see also Societies)	
Alloys, miscellaneous	134, 794, 795	Astronomer's tabulations	115
Alloys, processes of working	796	Astronomical clocks	127, 239
Alloys, tin	795	Astronomical instruments and methods	127
Alloys, zinc	793	Astronomical photographs	127
Allspice	632	Athletic goods (see Sporting goods)	
Aluminum and alloys	794	Athletic suits	426
Aluminum, working of	796	Athletic training	Group 13
		Atlases	112
		Attachments for machine tools	472
		Autography (printing)	95

	CLASS
Autolithographs, fine arts	3
Automobiles, parts and fittings	516, 518
Aviaries	302
Aviators' equipment	547
Awnings and fittings	302
Axes	297, 555, 662
Axles, steel	786

B

Baby carriages	514
Bacteriological equipment and preparations	135
Bags, paper	217
Bags, traveling	259
Bakery ovens and equipment	599
Baking kilns, pottery	319
Baking powders	619
Balances, sensitive	125
Balloon literature	551
Balloon motors	550
Balloons, dirigible, and equipment	543
Balloons for scientific use	544
Balloons, military	546
Balloons, spherical, and equipment	544, 545
Ballot, forms of	87
Balusters	300
Balustrades	281
Banking, co-operative	70
Banks and banking	Group 21
Bank note printing	99
Barbed wire	291
Bark, botanical specimens	660
Bark, medicinal	666
Bark, tan, and extracts	666
Barley	579
Barns (see Stables)	
Barometers	123, 545
Barrels	665
Basins for ships	203
Basket machinery	476
Basket work	258, 306
Bathing beaches	94
Bath tubs and fittings	330
Batteries, primary	512
Batteries, storage	511
Beacons	532
Bean flour	615
Beans	580
Bearing metals	468
Bed furnishings	317
Bee keeping	658
Beer	645
Bees	657
Beeswax	658
Beets	581, 583
Bells	289
Bells, fog	532
Belt conveyors	460, 756
Belting (power transmitting)	461
Belts (wearing apparel)	443
Bench shows	691
Bending machines	470
Bessemer steel (see Steel)	
Beverages, fermented	Group 131
Beverages, non-alcoholic	Group 128
Bicycles	517
Binder twine	558
Binoculars	132
Biological products	159
Bird cages	302, 699
Birds, domesticated	695
Birds, equipment for breeding	570, 699
Biscuit, manufacture of ship	599
Bisque ware	321
Bitters	642
Bitumen	775
Blacking	165
Blacksmiths' equipment	288, 470
Blankets	409
Bleaching equipment and processes (textiles)	Group 74

	CLASS
Blind, schools and publications for	30
Blinds (curtains)	317, 425
Blinds, Venetian	303
Block prints, fine arts	3
Blocks (tackle)	531
Blooms, steel	783
Blow pipes	148
Boards of Trade	43
Boat building material	527
Boat fittings	533
Boat models and plans	529, 533
Boats	Group 104
Boats, fishing	270
Boats, submarine	534
Boiler equipment and fittings	450
Boiler shop equipment	470, 475
Boiler testing appliances	455
Boilers for heating	346, 348
Boilers, steam	450, 530
Bolt and nut machines	472
Bolts and nuts	290
Bombycids	657
Bond printing	99
Bone work (product of hunting)	269
Book binding	109
Book binding, artistic	111
Book binding, specimens	110
Books	Group 30
Books, blank	216, 217
Books, children's	275
Books, school	38
Boot machinery	434
Boots	264, 431, 435, 436
Boring machines	472, 476
Boring tools	297
Botanical collections	660, 728
Bottles	337
Bottling machinery	612
Bouquets of flowers	733
Boxes, fancy	257
Boxes, metal	296
Boxes, packing	259
Boxes, paper	217
Boxes, wooden	665
Box machinery	476
Brads	291
Brandies	639
Brass, production of	790
Brazing	471
Bread	619, 620
Breeding grounds	553
Breweries and supplies	611
Brick making machinery	765
Bricks	325, 765
Bricks, materials for	318, 765
Bricks, refractory	326, 351, 732
Bridges	204, 520
Briquetted fuel and ores	776
Briquetting of ores	780
Bristles	654
Bronze, production of	790
Bronze (see also Alloys)	
Bronzes, hardware	289
Bronzes, ornamental	247, 252, 257
Broom corn	651
Brooms	255
Brushes	219, Group 52
Brushes, wall paper	311
Buckles, harness	289, 519
Buckles, wearing apparel	446
Buckwheat	579
Builders' hardware	298
Building material (see Structural material)	
Building materials, preparation	761, 764, 765
Building paper	121
Building societies	71
Building, steel plates and wire mesh for	293, 786
Building stone	761
Building stone, shaping of	762

	CLASS		CLASS
Buildings, completed, designs, drawings, and models	209	Cavies	693
Buildings, models and plans for erecting	212	Cement (building) and its production	764
Buildings, railway	520	Cemetery monuments	Group 59
Bulbs, flower	735	Ceramic decorations for buildings	284
Bunting for decorating	316	Ceramic materials	318, 765
Buoys and buoy lights	532	Ceramics	Group 66
Burial articles	Group 59	Cereals	579, 615
Burners for lighting	355, Group 71	Certification of teachers	10, 14
Business schools	13, 25	Chains	292
Butter	593	Chains, anchor	531
Butter workers	596	Chairs	285, 702
Button-hole machines	384	Chairs, sedan	513
Buttons	445	Chairs, upholstered	317
By-products, forest	666	Chandeliers and fixtures	301, 355, 358
By-products, packing-house	653	Charcoal	156, 666
By-products, petroleum	154, 776	Charcoal derivatives	156, 666
C			
Cabbages	582	Charcoal, production of	156
Cables, electric	510	Charities	Group 22
Cables, fiber (see Cordage)		Charters, city	90
Cables, for vessels	531	Charts, agricultural	573
Cable (power drives)	461, 756	Charts, astronomical, geographical, geolog- ical, hydrographic, topographical	112
Cables, wire	291	Charts, horticultural	Group 151
Cadmium	793	Charts, navigators'	112, 537
Caissons	195	Cheese	594
Cakes, dry for keeping	620	Cheese factories	567
Calcium	794	Cheese presses	596
Calcium carbide (see also Acetylene)	169	Chemical analysis, apparatus for	149
Calculating machines	133	Chemical arts	Group 36
Calorimeters, laboratory	125	Chemical laboratory apparatus	148
Calorimeters, steam	455	Chemical products	151, 156, 161, 165
Cambries	394	Chemical treatment of animal substances	150
Cameos	6, 233	Chickens (see Poultry)	
Camp equipment	260, 261, 262	Chicory	629
Camp furniture, military	262	Children, delinquent, destitute, neglected, care of	77, 78, 79, 84
Campers' articles	Group 53	Children's carriages	514
Canal construction	193, 202	Chimes for clocks	244
Canals, maritime	205	Chimney fittings	350, 351
Candles, chemical processes in making	150	Chimneys, boiler	450
Canes	444	Chimneys, earthenware	351
Canned fruits	717, 718	Chimneys, lamp	Group 71
Canned meat, fish and vegetables	Group 126	Chisels	297
Canning factories	603, 721	Chocolate	584, 605, 627
Canopies	317	Chromium	784
Cans	296	Chronographs	125, 129
Cans, dairy	596	Chronometers	128, 239, 242, 531
Caps	438	Church fabrics embroidered	424
Caps, fur	431	Church societies	44
Caps, metal	296	Churns	596
Carbonated waters	634	Cider	635, 645
Carbonating machinery	612, 634	Cider mills	559
Carborundum and corundum	766	Cigar cases	256
Card-board (see Paper)		Cigars	566
Carding machines	363	Cinnamon	632
Cards, blank	217	Circulating pumps	454
Cards, playing	217	City beautification and plans	93
Care of the sick	57, 526	Civil engineering	Group 40
Cargo, handling equipment	531, 756	Civilian uniforms	426
Carpenters' implements and tools	297	Class work exhibits	42
Carpentry, models of work	277	Clay	765, 767
Carpets	314	Clay, refractory	767, 782
Carpet looms	313	Clay separating, washing, etc.	763
Carpet sweepers	285	Cleaning processes for clothing	375
Carriages	513, 514	Climate, effects of forests on	663
Carriages, parts and fittings	518	Cloaks	428
Carriers, cash	301	Clocks	Group 48
Cars, railway and traction	521, 524	Clocks, astronomical	127, 239
Carton pierre for buildings	279	Clocks, electric	240
Carts	515, 559	Clocks, making of	Group 48
Carvings, fine arts	7	Clod crushers	555
Carvings, ornamental for buildings	280	Cloth, cotton	389
Case hardening	798	Cloth cutting machines	382
Cases, packing	259	Cloth for ladies' wear	401, 402
Cash registers	133	Cloth hangings	317
Caskets, burial	Group 59	Cloth, horse hair	315
Castings, steel	783	Cloth of animal fiber	400
Cats	692	Cloth, oil	315
Cattle (see also Live stock)	Group 137	Cloth, wire	291, 788
Cattle, breeding and fattening	553, 680	Clothing, cleaning and pressing	375
		Clothing, ecclesiastical	426

	CLASS		CLASS
Clothing for aviators	547	Coral	235, 273
Clothing for children	426	Cordage	397
Clothing for games and sports	267, 271	Cordage, machinery for	362
Clothing for women and girls	429	Cork	666
Clothing, fur	431	Corks, druggists'	147, 589, 666
Clothing, leather	426	Corn	579
Clothing, men's and boys'	426, 427	Corn harvesters and shellers	558
Clothing, military	426	Corn planters	556
Clothing to measure	426, 428	Corporations, public service	88
Clothing, (see also Suits and Wearing apparel)		Corsets	442
Clutches	461	Cosmetics	165
C O ² recorders	455	Cost of living	65
Coaches, railway	531	Costumes, children's	426
Coal	776	Costumes, livery	426
Coal handlers and conveyors	450	Costumes, magistrates'	426
Coal crushing and separating machinery	776	Costumes, theatrical	186
Coal dust and compressed coal	776	Cotton	646
Coal handling, underground	750	Cotton balers and gins	559
Coal mining	748	Cotton fabrics	389
Coal, prospecting for	744	Cotton planters	556
Coal tar products	154	Cotton threads	377, Group 76
Coated metals	798	Cotton velvets and ribbons	390, 391
Cochineal insects	657	Counterpanes	392
Cocks, steam and water (see Valves)		Counters, engine	455
Cocoa, plants and products	584	Court procedure	86
Cocoons, silk	658	Cradles for grain	558
Coffee	629	Craft, pleasure	533
Coffee, hulling and roasting	607	Craft, small power	529
Coffee, plants and products	584	Cranes, cargo handling	531
Coffee substitutes	629	Cranes, locomotive	521
Coffins	287	Cranes, machinery	459, 531
Coiffures	439	Cravats	441
Coins, dies for, literature of, making of	134, 776	Cream	592
Coke	776	Creameries	567
Cold storage meats	591	Credit systems	70
College entrance requirements	15	Crime, statistics of	81
College examination boards	15	Criminals, identification of	81
Colleges	16	Cripples, schools for	33
Colleges, agricultural	24	Crochet work	419
Colonization bureaus	522	Crops, fluctuation in price	575
Color photography	123	Crops, statistics of yield	574
Color printing (on paper)	101	Crops, wild	Group 121
Colors (see Pigments)		Cross fertilization, fruits and nuts	724
Combs	257	Crucibles	782
Commerce, government promotion of	47	Crucible steel (see Steel)	
Commercial buildings (see Buildings)		Crystallography	760
Commercial organizations	44	Crystal ware	Group 68
Commissary stores and equipment	625	Cultivated lands, division of	574
Commutating apparatus	Group 91	Cultivators	557
Commutators	496, 498	Current deflectors	202
Compasses, mariners'	128	Current, electric, controlling devices	509, 510
Compasses, surveyors'	126	Current meters, water	126
Compounds, chemical	161	Current meters, wind	128
Compressors, air and gas	464, 749	Curtains	317
Concentration of ores	780	Curtains, embroidered and lace	425
Condensers, electric	484, 492	Cutlery and its manufacture	Group 45
Condensers, steam	454, 530, 531	Cutlery (also see Knives)	Group 45
Condiments	633		
Conduits, electric	510	D	
Confectionery	627	Dairies	567
Confectionery, manufacture of	605	Dairy appliances and fittings	596
Conservation of natural resources	48	Dams	202
Conservatories for plants	703	Deaf and dumb schools	31
Conservatory plants	729	Deaf, devices for the	188
Continuation schools	11	Decorations, fixed, for buildings	Group 57
Converters, Bessemer	783	Decorations for fireplaces and mantels	329, 351, 352
Converters, electric	486, 494	Decorations for roofs	281
Conveying hot air, hot water and steam for heating	344	Decorations, upholsterers'	Group 65
Conveyors	460, 750, 756, 780	Decorations (see also Ornamental work)	
Cooking apparatus and utensils	348	Defectives, care of	57, 78, 84
Cooking devices, electric	Group 61	Defectives, schools for	29
Cooking equipment, gas	355	Defenses, military	197
Cooking stoves	348	Delinquents, education of	29, 83
Cooling systems and towers	454	Demography	Group 16
Cooperage	665	Denaturing substances for alcohol	168
Co-operative institutions	Group 20	Dental surgery and models of work	142
Copper alloys	790	Dentistry, apparatus, implements and materials for	142
Copper-plate printing	95	Dentistry, electricity used in	139
Copper-plate printing, specimens of	101	Designs of buildings	209, 210
Copper, production and refining of	790	Desk accessories	Group 44

	CLASS
Destitute, care of	78, 79
Devices, safety (see Appliances, safety)	
Dictating machines	100
Dictographs	188
Dies for coins and metals	134
Differential pulleys	459
Dikes	206
Diseases, communicable	55
Diseases, occupational	58
Diseases of fruits and fruit trees	725
Diseases of plants, remedies	659
Diseases of shade trees, flowers, etc.	732
Disinfectants and their manufacture	160
Disputes, industrial	66
Distillates from wood	156, 666
Distilled spirits	644
Distilleries and supplies	609
Distillers, fresh water	531
Distribution of ores and minerals, diagrams showing	760
Diving apparatus	195
Docks for vessels	203, 520
Dogs	Group 141
Dogs, appliances for training	266
Domestic animals (see Live Stock)	
Domestic animals not classified	686
Door fittings	298
Doors, bronze	281
Doors, devices for operating	214
Doors, iron	281
Doors, wood	278, 665
Down (feathers)	654
Drainage for agriculture	554
Drainage of mines	751
Drain tiles	323, 554
Draperies	425
Drawings, materials	219
Drawing paper	121, 219
Drawings, architectural	209
Drawing, fine arts	2
Drawings for illustrating publications	106
Drawings, photo-mechanical	102
Drays	515
Dredges, models of	202
Dredging machinery	466, 759
Dresses	428
Dressing wounds, appliances for	140
Dressmakers' work	428
Dried fruits	716
Drift cutting (mining)	746
Drilling machines	472
Drives (power transmitting)	461
Drop forging hammers	470
Drowning, appliances for aid in	145
Druggists' equipment and utensils	147
Drug habits and regulations	Group 13
Drug preservatives	160
Drug trade regulations	62
Drugs	159
Drugs, adulteration of	164
Drugs, materials for	159, 589, 650, 666, 737
Drugs, preparing of	159
Drums	178
Ducks	696
Dump carts	515
Dusters, feather	255
Dust from precious metals, recovery of	796
Dust handling in metallurgy	781
Dyeing, equipments and processes	368, 370, 372
Dyeing, re-dyeing	375
Dye stuffs	589, 650, 657, 773
Dye stuffs, preparation of	368
Dyes, plants containing	589, 650, 666
Dynamometers	455

E

Earthenware (see also Ceramics, Glass)	322
Earthenware, agricultural	323

	CLASS
Earthenware, manufacture of	319
Earthenware, materials for	318, 765
Earthenware, ornamental objects of	246
Earthenware, sanitary	330
Earthenware stoves and chimneys	351
Earthwork, equipment for	466, 520, 759
Economic conditions, study and investigation of	Group 14
Economic publications, reviews, etc.	45
Economic reform associations, etc.	45
Economic resources	Group 15
Economics, instruction in	45
Economizers, fuel	450
Economy, promotion of	92
Edible wild fruits	588
EDUCATION	Dept. B
Education, agricultural	23
Education, elementary	Group 5
Education, higher	Group 7
Education of Indian and Negro	Group 10A
Education, secondary	Group 6
Education, special forms of	Group 12
Education, special in commerce and industry	Group 10
Education, special in fine arts	Group 8
Education, vocational	12
Educational agencies, etc.	45
Educational publicity	60
Efficiency, promotion of	92
Eggs	595
Elastic goods	443
Electron systems	Group 24
Electric annunciators	189
Electric apparatus for theaters	184
Electric appliances for distribution and control of current	Group 99
Electric appliances for indicating, measuring and recording	129, Group 98
Electric bleaching of fabrics	373
Electric chronographs	129
Electric clippers	559
Electric clocks	240
Electric concentration of ores	780
Electric cooking devices	307
Electric distributing and controlling apparatus	Group 99
Electric equipment of railway cars	521
Electric furnaces	129, 148
Electric heaters	307
Electric instruments for laboratory use	Class 129, Group 98
Electric instruments for switchboards	503
Electric irons	307
Electric lamps	Group 97
Electric light fixtures	301, 358, 510
Electric lighting applied to navigation	532
Electric locomotives	521
Electric locomotives for mines	750
Electric motors for mines	749
Electric motors for roadways	194
Electric ovens (see also Electric cooking devices)	148
Electric ozonizers	139
Electric refining of copper	790
Electric refining of metals	794, 797
Electric refining of steel	783
Electric signal apparatus	Group 39, 520, 754
Electric sign mechanism	510
Electric smelting	783
Electric sterilizers	139
Electric thermal batteries	129, 148
Electric thermostats	307, 349
Electric treatment of factory waste to avoid pollution of water and air	155
Electric welding	797
Electrical equipment for ships of war	540
Electrical standards	129
Electrical workers' tools	510 1/2
Electrically driven agricultural machinery	558
Electricity applied to dentistry	139
Electricity for ship use	531

	CLASS		CLASS
Electricity in metallurgy	797	Extracts, flowers and plants grown for . .	737
Electric-chemical apparatus	Group 36	Extracts, meat	621
Electro-metallurgical processes	794	Extracts, perfumery	165
Electro-plating	797	Extracts, vegetable	152
Electro-thermal apparatus	151, Group 61	Extruding presses	470
Electro-thermic and electrolytic printing . .	97	Eye glasses	132
Electrolysis in manufacture of chemical products	151	Eyes, artificial	143
Electrotyping	97, 797		
Elevated railways	207, 524	F	
Elevators for materials	460, 756	Fabrics, cotton	Group 76
Elevators, grain	568	Fabrics, mixed	395, 402, 408, 415
Elevators, passenger	196	Fabrics of animal fibres	Group 78
Embankments	193	Fabrics, silk and silk-mixed	Group 79
Embroidered curtains	425	Fabrics, thickening of	368
Embroidered fabrics, machines for making	364	Fabrics (see also Goods, Textiles)	
Embroidering machines	383	Factories, canning	603
Embroidery appliqué	421	Factories, regulation and inspection of . .	63
Embroidery for church fabrics	426	Faience	322
Embroidery, hand made	421	Families, needy, care of	79
Embroidery, machine made	422	Fancy articles	257
Embroidery, ornamented	421	Fans	447
Embroidery (see also Trimmings)		Farinaceous foods and products	Group 124
Emery	766	Farm animals, census of	574
Emigration	49	Farm buildings and systems	Group 114
Employees, organization of	64	Farm equipment and machinery	Group 115
Employers, organization of	64	Farm progress	575
Enameled glass	338	Farm weighing machines	559
Enameled hollow ware	295	Farming systems	552
Enameled metal plates	294	Fats, edible, animal	591
Enameling of metals	230, 799	Fats, vegetable	585, 589, 648
Enamels applied to ceramics	328	Feathers	654
Enamels applied to glass	338	Feathers used for millinery	439
Enamels, fine arts	1	Feeble-minded, institutions for	32
Enamels, preparation of	319	Feed cutters and grinders	559, 561
Engineering, agricultural	554	Feed pumps	451
Engineering, architectural	Group 43	Feed water, handling equipment for	451
Engineering material	785, 786, 789	Feed-water heaters and purifiers	451, 530
Engineering material for army use	197	Feed-water regulators	451
Engineering schools	17	Feldspar	765
Engineering societies, publications of	208	Felt goods	410
Engineering works, plans of	207	Fence wire	291
Engine fittings	449, 452	Fermented beverages	645
Engine indicators	455	Ferrieres	704
Engine testing appliances	455	Fertilizers	562, 774
Engines, fire	463	Fibers, animal	Group 78
Engines for farm use	560	Fibers, vegetable	393, 396, 589, 646, 666
Engines, hoisting	459, 531, 749	Fibers, workshops for preparing	569
Engines, steam	449, 530	Field glasses	132
Engraved gems, fine arts	6	Field sports, training for	Group 13
Engravers' tools	219	Figs	711
Engraving of gems	6, 233	Figures for fitting garments	386
Engraving on metal	95	Filing systems	285
Engraving on stone	95	Filled metals	798
Engravings, fine arts	3	Fillers (paints)	773
Engravings, photo-mechanical	102	Filters for chemical use	148
Enterprises, industrial	47	Filters, water, for home use	634
Entertainments, public	94	FINE ARTS	Dept. A
Envelopes	217	Finishing machines for metals	472
Equipment for vessels	531, 540	Fire alarm apparatus and systems	183, 189, 754
Equipment (see also Apparatus, Appli- cances, Implements, Instruments, Ma- chinery, Supplies and Tools)		Fire clay	767
Erosion, prevention of	663	Fire, colored, for theaters	184
Essences, vegetable	152	Fire engines and apparatus	463
Essential oils	165	Fire escapes	214
Etchers' instruments	219	Fire extinguishers	183, 463
Etchings, fine arts	3	Fire lighters	352
Eugenics	51	Fireless cookers	348
Evaporators (water)	531	Fireplace borders	329, 351
Examinations boards, college	15	Fireplace fittings and pottery	351, 352
Excavating loose materials	759	Fire preventing apparatus for vessels . .	530
Excavating machinery	466, 520, 759	Fire-proof materials	326
Exhaust heads	453	Fires, fighting in mines	754
Experiment stations, agricultural	576	Fish canned and cured	622
Explorers' portable outfits	260	Fish curing establishments	602
Explosions, preventing in mines	754	Fish, preserved	622
Explosives	542	Fish products	622
Explosives, handling for mines	747	Fish, refrigerated	591
Extension school courses	36	Fishing, equipment for and products of . .	Group 55
Extracts, flavoring	165, 632	Fittings, boiler	450

Fittings, door and window.....	298	Fruit pests and diseases.....	725
Fittings for gas, steam, water.....	289, 453	Fruit, photographs, etc.....	715
Fittings for heaters.....	349	Fruit tree quarantine.....	742
Fittings, plumbers'.....	289, 330	Fruit trees and vines.....	722
Flags for decoration.....	316	Fruit yield, agencies affecting.....	739
Flags for ships.....	531	Fruits, appliances for gathering, packing and transporting.....	700
Flannels (see also Fabrics).....	404	Fruits, branded.....	718
Platirons.....	289, 307, 385	Fruits, canned, dried, preserved.....	Group 147
Flax.....	646	Fruits, forced culture of.....	731
Flax threads.....	Group 77	Fruits, fresh.....	Group 146
Floods, protection from.....	206	Fruits, glacé.....	627
Floor coverings.....	264, 315	Fruits, small, plants of.....	723
Floors, inlaid.....	278	Fruits, specimens of miscellaneous.....	Group 146
Floors, mosaic.....	283	Fruits, wild, edible.....	588
Floriculture, appliances and methods of Group.....	144	Fuel apparatus for internal combustion motors.....	456
Florists' supplies.....	733	Fuel-burning systems.....	450
Flour.....	615	Fuel, compressed.....	776
Flower bulbs and seeds.....	734, 735	Fuel for railways.....	523
Flower diseases.....	732	Fuel preparation and equipment.....	776
Flower pots.....	702	Fuels for metallurgy.....	355, 781
Flowering plants.....	728	Fuels, mineral.....	776
Flowers, artificial.....	439, 733	Fuels, wood (see also Charcoal).....	666
Flowers, botanical specimens.....	660, 728	Fuller's earth.....	765
Flowers, cut.....	733	Fumes, handling in metallurgy.....	155, 781
Flue gas analysis apparatus.....	455	Fungicides.....	170, 659, 725, 732
Flue stoppers.....	350	Fur boots.....	431
Fluorspar.....	768	Fur caps, hats, hoods.....	431
Fodder.....	586	Furs.....	430
Foliage, botanical specimens.....	660	Furs, raw.....	268
Food for animals, preparation of.....	561	Furnaces, boiler.....	450
Food for poultry.....	570, 699	Furnaces, electric (see Electric furnaces).....	
Food for stock.....	561	Furnaces for heating buildings.....	346
Food, hygiene of.....	53	Furnaces for making steel.....	783
Food, infants' and invalids'.....	618	Furnaces, laboratory.....	129, 148
Food pastes and their manufacture.....	598, 617	Furnaces, metallurgical, operation of.....	781
Food products, animal.....	Group 122	Furnaces, metallurgical, plans and con- struction of.....	781
Food products, vegetable.....	Group 120	Furnaces, pottery-baking.....	319
Food, pure, laboratories.....	56	Furnaces, re-heating.....	783
Foods, albuminoid.....	595	Furnaces, roasting.....	780
Foods, factory preparation of.....	Group 123	Furnaces, smelting.....	781
Footwear (see Boots and Shoes).....		Furnace temperatures, measuring of.....	781
Forage.....	586	Furniture, covering materials for.....	315
Forced culture of fruits.....	731	Furniture, fixed, for buildings.....	Group 57
Forced culture of plants and vegetables.....	571	Furniture for stables and kennels.....	553
Forced draft equipment.....	450	Furniture for theaters, special.....	182
Forcing presses.....	472	Furniture, house and office.....	Group 58
Forest by-products.....	666	Furniture, metal.....	301, 702
Forest geography, maps and literature.....	660	Furniture, naval.....	540
Forest products.....	Group 135	Furniture, ship.....	531, 540
Forest protection and utilization.....	662	Furniture, small, fancy.....	257
Forestry, instruction in.....	24	Furniture woods.....	665
Forestry (see also Logging and Lumber) Group.....	134	Fused quartz products.....	326
Forests, distribution of.....	660	Fuses, electric.....	510
Forests for recreation and game preserves.....	663	Fuses for explosives.....	747
Forests, types of.....	660	Fuses, ordnance.....	542
Forging equipment.....	288, 470		
Forging hammers and processes.....	470		
Forging presses.....	470		
Forgings, large.....	786		
Foundations, drawings for.....	213		
Foundations, equipment for and methods of preparing.....	195		
Foundry equipment and products.....	789		
Fountains, garden.....	702		
Fountains, soda.....	634		
Frames, upholsterers'.....	317		
Freight cars.....	521		
Freight handling.....	522		
Frequency changers.....	485, 493		
Fresh meats (see Meats).....			
Frost benefits in horticulture.....	741		
Frost fighting in horticulture.....	701, 713		
Fruit, botanical specimens.....	660, 719		
Fruit canneries.....	721		
Fruit culture.....	Group 148		
Fruit foods.....	627, 628, Group 147		
Fruit industry, maps showing location of.....	738		
Fruit juices.....	635		
Fruit, models in wax, etc.....	715		

G

Gages, steam.....	349, 450, 455
Gages, water.....	340, 450
Galvanizing.....	798
Game preserves.....	663
Game, refrigerated.....	591
Games, children's.....	275
Games and sports, material for.....	267
Garages (see Buildings).....	
Garbage (see Waste disposal).....	
Garden architecture.....	705
Gardening, market.....	571
Gardens, ornaments for.....	702
Garters.....	443
Gas, acetylene.....	169
Gas compressors.....	354, 464
Gas cooking apparatus.....	355
Gas distributing equipment.....	354
Gas engines and turbines.....	456
Gas fixtures.....	301, 355, 358
Gas, generation of, for industrial uses.....	355, 781

	CLASS
Gas generators for internal combustion	456
motors	456
Gas heaters	346, 355
Gas lighting equipment	355
Gas lighting fixtures	301
Gas, manufacture of	353
Gas, natural, handling of	757, 776
Gas producers	353, 781
Gas, prospecting for	744
Gas, uses for industrial purposes	355
Gases for balloon use	549
Gases in mines	753
Gases, mineral	776
Gaskets	468
Gauze, wire	291
Gearing (gear wheels)	461
Geese	696
Gelatine	165, 591
Gem cutting	233, 769
Gems	6, 233, 769
Gems, artificial and imitation	234, 340, 769
General machinery	469
Generators, electric	Groups 91, 92, 94
Generators, steam (see Boilers)	
Geodesy instruments	126
Geographic apparatus and instruments	
Group 31, Class 126	
Geologic collections	760
Geologic features shown by maps, charts, etc.	779
Geologists' portable outfits	260
Geology, literature and statistics	800
Geometric instruments	125
German silver	795
Gilded ware	229
Gin	644
Ginger ale	634
Glacé fruits	627
Glass and glassware	Group 68
Glass, enamel	253
Glass, furnaces for making	332
Glass insulators	308
Glass, materials for	331, 765
Glass, manufacture of	332, 765
Glass, moulds for	332
Glass, mosaic, for architecture	211
Glass, ornamental objects in	245, 336
Glass, stained, leaded, mosaic	Group 51
Glazes	165
Glaziers' implements	773
Glazing in building	773
Globes, celestial, terrestrial	114
Globes, lighting	358
Gloves	431, 437
Glucose	583, 626
Glucose factories	597
Glue	165
Gluten	615
Glycerine, manufacture of	150
Goats	686
Gold	791
Gold beaters' products	304
Gold, metallurgy of	790, 791, 792, 796
Goldsmiths' ware	Group 46
Goldsmiths' tools and equipment	228
Government promotion of industries	47, 576
Governors, steam	449, 452, 530
Grafting of plants	722, 723, 726, 727, 736
Grain	579, 615
Grain cleaning machinery	558
Grain cradles	558
Grain drills	556
Grain elevators	568
Grain separators	558
Granaries on the farm	553
Granite (see Building stone)	
Grape juice	640
Grapes	709
Grapes, picking, packing, etc.	707
Graphite	468, 768
Graphophones	180

	CLASS
Grate bars, boiler	450
Gratings	300
Gratings, heating and ventilating	350
Gravel, handling of	759
Grease for lubricating	468, 776
Grill work	281
Grill work, metal	300
Grinding machines for feed	559, 561
Grinding machines for metals	472, 473
Grinding machines for tools	472
Grinding materials	766
Grind-stones	766
Groats	615
Growth, hygiene of	53
Guinea fowls	698
Gums, resins	590, 666
Gun barrels	786
Guns, sportsmen's	265
Gutta percha	264, 590
Gutta percha, manufacture of	263
Gutta percha products	264
Gymnasiums	41
Gymnastic suits	426
Gymnastics, systems of	42
Gypsum	768

H

Hair, animal	654
Hair fabrics	Group 78
Hair, false (see also Coiffures)	439
Hair, ornaments for	439
Hammers	297
Hammers, drop forging	470
Hammers, steam	470, 783
Hampers (baskets)	258
Hand carts	515
Hand forging equipment	288
Hand shears (machinery)	470
Handkerchiefs	394
Hangers, shaft	461
Hangings, cloth	317
Hangings, leather	315
Hardening of metals	471
Hardware	Group 60
Hardware, builders'	298
Hardware, castings and forgings	289
Hardware, plated	305
Hardware, upholsterers'	298
Harness and parts	519
Harness brushes	255
Harrows	555
Harvesting implements	558, 587
Hatchets	297
Hat-making machinery	387
Hats	438
Hats, fur	431
Hawfers	531
Hay balers	559
Headers (reapers)	558
Heads, exhaust	453
Health, laboratories	56
Hearses	514
Hearth furnishings	329, 352
Heaters, electric	Group 61
Heaters, feed-water	451
Heaters for orchards	701
Heating apparatus for buildings	Group 69
Heating apparatus, accessories for	
349, 351, 352	
Heating apparatus for hothouses	703
Heating, methods of	343, 344, 355
Heating of railway cars	523
Heating of ships	531
Heating, plans and models for	343
Heating stoves	346
Heat insulating material	468
Helioscopes	127
Heliotropes	126
Hemming machines	383
Hemp	646
Hemp threads	Group 77

	CLASS
Histological instruments and appliances	135
Histological preparations	135
History of agriculture	575
Hoes	555, 557
Hogs (see also Live Stock)	Group 140
Hollow ware	295
Honey	658
Hoods, fur	431
Hooks	291
Hooks and eyes	446
Hops	651
Horn work	269
Horse clippers	559
Horse equipment	519
Horse-power machines	560
Horse shoes	289
Horse hair cloth	315
Horses (see also Live stock)	Group 136
Horticultural charts and diagrams	Group 151
Horticultural methods, tools and appliances	700
HORTICULTURE	Department K
Horticulture, theory and statistics of	Group 151
Hose, steam	453
Hosiery	441
Hospitals	57, 526
Hot air engines	458
Hot air and hot water heating	Group 69
Hothouse plants	729
Hour glasses	243
Household articles of wood	306
Household utensils	295, 348
Household utilities	285
Houses, glass, for plants	703
Houses, portable	261
Houses, summer	302
Houses (see also Buildings)	
Houses systems and methods	93
Humane societies	44, 535
Hunting equipment	266
Hunting products	Group 54
Hunting suits	426
Hydraulic accumulators, pumps, and equipment	470, 783
Hydraulic mining	759
Hydraulic motors	457
Hydraulic presses	470, 783
Hydraulic rams	462, 559
Hydro-aeroplanes	548
Hydrogen for balloons	549
Hydrogen, peroxide, manufacture of	151
Hygiene, general	Group 17
Hygiene, military and naval	59
Hygiene of exercise	40
Hygiene of growth and nutrition	53
Hygiene of infancy and childhood	54
Hygiene of schools	Group 5
Hygiene of traffic	59
Hygiene, special	59

I

Ice machines	467, 601
Ices, preparation of	606
Identification of criminals	81
Illustrations for books, newspapers, etc.	106
Imitation flowers and plants	439, 733
Imitation jewelry	234
Imitation lace	420
Imitation precious stones	234, 340, 769
Immigration	50, 522
Implements, agricultural	587, Group 115
Implements (see also Apparatus, Appliances, and Equipment, Instruments, Machinery, Supplies and Tools)	
Impulse wheels (water)	457
Incubators	570
India rubber (see Rubber)	
Indian schools	27
Indicators	125, 455

	CLASS
Indigent, care of	78, 79
Induction apparatus, rotary	Group 94
Induction apparatus, stationary	Group 93
Industrial accidents	67
Industrial bureaus	522
Industrial disputes	66
Industrial enterprises	47
Industrial hygiene	58
Industrial remuneration	65, 67
Industrial work, regulation of	63
Industries, agricultural	567
Industries, government promotion of	47, 576
Inedible agricultural products	Group 132
Infant foods	618
Infirm, apparatus for	143
Ingots	783, 790
Initiative, referendum and recall	86
Injectors	451
Ink and ink stands	218
Ink, printing	165
Inland navigation	202
Insecticides	170, 700, 725, 732
Insects, injurious and useful	662, 725, 732, Group 133
Insects, means of destroying	659, 700, 725, 732
Inspection of factories	63
Inspection of mines	63
Inspection of work	63
Institutes of art	21
Institutes, public	36
Institutional societies	44
Institutions, agricultural	576
Institutions, co-operative	Group 20
Institutions for the blind	30
Institutions for care of the destitute	78
Institutions for the deaf and dumb	31
Institutions for the feeble-minded	32, 78
Institutions, scientific	17, 37
Institutions, technical	17
Instruments for measuring	125, 236, 474
Instruments, electric (see Electric instruments)	
Instruments, geometrical and mathematical	125
Instruments, navigating	128, 531
Instruments of precision	Group 34
Instruments, optical	132
Instruments (see also Apparatus, Appliances, Equipment, Implements, Machinery, Supplies, Tools)	
Insulating material (electric)	Group 62
Insulating material (heat)	468
Insulators, electric	510
Insurance	75, 76, 526, 576
Intaglios	6, 233
Integrators	125
Intensifiers, hydraulic	470, 783
Internal combustion motors	456, 560
Invalids, apparatus for	143
Invalids' chairs	143, 514
Invalids' foods	618
Investigations, social	46
Iron, commercial forms of	786
Iron, direct manufacture of	783
Iron doors	281
Iron, pig, manufacture of	781
Iron work decorations for buildings	281
Iron, wrought, production of	785
Iron (see also Steel)	
Irons, pressing	289, 307, 385
Irrigation	554, 572
Isinglass	622
Ivory	269
Ivory, carvings in	4, 257

J

Jacks and jennets	675
Jacks, lifting	459
Jackets	428

	CLASS	CLASS	
Jails	82	Leather for furniture covering and hangings	315
Jellies and jams	718	Leather, ornamental objects in	248
Jet	235, 775	Leather toys	275
Jetties	203	Lecture-room apparatus	125
Jewel cases	257	Lectures	36, 40
Jewelry and its manufacture	Group 47	Legal aid to the poor	85
Jewelry, theatrical	186	Legislation	Group 23
Jewels for watches	237	Legislation against corrupt practice	87
Joiners' tools and implements	297	Legumes	580
Joiner work	278	Lens-grinding machinery	342
Junction boxes	510	Lenses	132, 342
Juvenile delinquents	84	Lenses for eyeglasses	342
	K	Lenses for testing vision	132
Kaolin	765	Lentil flour	615
Kennels	553, 691	Lentils	580
Kilns for earthenware	319	Letter presses	218
Kilns, line and cement	764	Leaves	193, 206
Kindergartens	8	Leveling instruments	126
Kinetscopes	122	Liability, employers'	67
Kitchen equipment	295, 306, 348	LIBERAL ARTS	Department D
Kitchen sanitation and ventilation	343	Libraries	19, 92, 104, 526
Kneading machines	599	Life saving	57
Knitted goods	405, 440, 441	Life-saving equipment (see also 144, 755)	535
Knitting machines	365	Lifts for canals	202
Knives	555, 700, Group 45	Light, instruments for measuring	130
	L	Lighthouse equipment	532
Labels for fruits	715	Lighting apparatus, methods and systems	355, Group 71
Labels, plant	702	Lighting equipment, electric	Group 97
Labor disputes, settlement of	66	Lighting fixtures	301, 355, 358, 510
Labor, economics of	Group 19	Lighting, mineral substances used for	776
Labor on farms, change in price of	575	Lighting of mines	753
Labor organizations	64	Lighting of railway cars	523
Laboratories, agricultural	576	Lighting of theaters	184
Laboratories, municipal	91	Lighting of vessels	531
Laboratory apparatus, chemical	148	Lightning arrestors	508
Laboratory apparatus, electric	129, 506	Lights, ships'	531
Laboratory apparatus, physical	125	Lignite	776
Laboratory appliances for tobacco	565	Limbs, artificial	143
Laboratory glassware	335	Lime and its production	764
Laboratory paper	121	Limens	394, 395, 396
Lace curtains	425	Linoleum	315
Lace, hand-made	419	Liquefied gas and apparatus for	157
Lace, machine-made	420	Liqueurs	641, 642
Lace-making machinery	365	Liquor trade regulation	61, 62
Lacquer work	257	Liquors	644, 645
Ladies, tailors, work of	428	Lithography	95
Lambrequins	425	Lithography specimens	101
Lamp shades, metal	296	Livery costumes	426
Lamps	355, Group 71	LIVE STOCK	Department J
Lamps, electric	Group 97	Live stock, fluctuations in price	575
Lamps, laboratory	148	Live stock, methods of raising, statistics, etc.	677, 680, 685, 687, 689
Lamps for mines	753	Living, cost of	65
Land, division of cultivated	574	Loan collection, fine arts	Group 4
Land, history of price fluctuation	575	Loan companies	73
Land, legislation for	577	Lobster, canned	623
Land, loans on	576	Locks for canals	202
Land ownership, registry of	573	Locksmiths' hardware	281, 298
Land rents, fluctuation of	575	Locksmiths' implements and methods	281, 288
Land, yield and return from	574	Locomotives	521
Landscape gardening	705	Locomotives for mines	750
Lapidary work	233, 769	Logging methods and equipment	662
Lapidary work, imitation	234	Logs, patent	128, 531
Lathes	228, 236, 472, 473	Looms, carpet	313
Lathes for glass cutting	332	Looms, cloth	364
Launches, power	529	Lubricants	468, 523, 776
Laundry fittings	330	Lubricants, manufacture of	776
Laundry work and equipment	374	Lubricating apparatus and systems	449, 468
Lavatory fittings	330	Lumber	664
Laws for mine safety	754	Lumber cutting and grading	664
Laws, railway	526	Lumber, re-manufacture of	665
Lead, metallurgy and products	792	Lunatics, appliances for	143
Lead, metallurgy and products	792		
Lead, working of	796	M	
Leather	Group 52	Macaroni	617
Leather articles	Group 52	Machetas	555
Leather, artificial	312, 315	MACHINERY	Department F
Leather clothing	426	Machinery, agricultural	Group 115
Leather cutting machines	382		
Leather, fine articles in	256		

	CLASS		CLASS
Machinery, boat propelling	530	Marble (see also Building stone)	762
Machinery, book making	109, 216	Margarin factories	568
Machinery, boot and shoe	434	Marine glasses	132
Machinery, bottling	612	Marine ordnance	542
Machinery, brewers'	611	Mariners' tables	115, 537
Machinery, brick and tile	765	Maritime canals	205
Machinery, button hole	384	Market gardening	571
Machinery, carbonating	634	Market season for various fruits	739
Machinery, carpet making	313	Marshes, reclaiming of	554
Machinery, cloth, skin and leather cutting	382	Masons' implements and tools	288, 762
Machinery, conveying	460, 750, 756, 780	Matches, manufacture of	163
Machinery, cordage and rope	362	Mathematical apparatus and instruments	125, 219
Machinery, distillers'	609	Mats, floor	314
Machinery, dredging and excavating	202, 466	Mats, fur	432
Machinery, earthenware manufacturing	319	Mattocks	555
Machinery, embroidering	383	Mausoleums and fittings	286
Machinery, finishing, for textiles	371	Measuring instruments	125, 236, 474
Machinery, gas making	353	Measuring standards of various countries	133
Machinery, general	469, 477	Meat, canned, cured, preserved and salted	Group 126
Machinery, glass-cutting	332	Meat, canning and curing of	603
Machinery, glove-sewing	384	Meat extracts and tablets	621
Machinery, goldsmiths'	228	Meat, fresh, equipment for preserving	602
Machinery, hat-making	387	Meat, fresh, refrigerated	591
Machinery, hemming	383	Mechanical stokers	450
Machinery, knitting	365	Medals, fine arts	6
Machinery, lace-making	365	Medals, literature of	134
Machinery, laundry	374	Medals, making of	134
Machinery, leather-sewing	384	Medical gymnastics	141
Machinery, marine propelling	530, 541	Medical material (see Drugs, materials for)	
Machinery, net-making	272	Medical research, instruments for	137
Machinery, paper-making	119, 120	Medicinal plants	589, 650, 666, 737
Machinery, printing	Group 29	Medicines	Group 35, Class 159
Machinery, railway building	520	Meerschaum	768
Machinery, refrigerating	467, 601	Mercantile marine	Group 104
Machinery, road making	194	Mercury	793
Machinery, sail handling	531	Merino fabrics	403
Machinery, sewing	383, 384, 434	Metal, bearing	468
Machinery, ship-yard	528	Metal decorations, permanent, for buildings	281
Machinery, silversmiths'	228	Metal doors	281
Machinery, spinning	359	Metal framing for buildings	213
Machinery, stitching	383	Metal grill work	300
Machinery, stone-shaping	762	Metal, ornamental objects in	247
Machinery, straw-plaiting	384, 387	Metal pavilions	302
Machinery, testing appliances for	455	Metal plates for builders	293, 788
Machinery, textile	Groups 72, 73, 74	Metal sheets, remanufactured	296
Machinery, theatrical	185	Metal shutters	303
Machinery, trimming making	365	Metal work for beds and fixtures	301
Machinery, tulle-making	365	Metal work for buildings	281
Machinery, type-setting	98	Metals, analysis of	745
Machinery, wall paper printing	310	Metals, electric refining of	797
Machinery, watch makers'	236	Metals for clocks and watches	237
Machinery, weaving	363, 364	Metals, miscellaneous	793, 794
Machinery, wood-working	476	Metals, native	777
Machinery (see also Apparatus, Appliances, Equipment, Implements, Instruments, Supplies, Tools)		Metals, rare, working of	796
Machine shop accessories	472	Metals, testing of	191, 745
Machine tools and their attachments	472	Metallic foils	304
Machines, copying and duplicating	100	Metallurgical furnaces	Group 155
Machines, typewriting	100	Metallurgical processes	Group 155
Machinists' hand tools	288, 474	Metallurgv, literature and statistics of	800
Magazines (publications)	103	Meteorological instruments	128
Magnesium	794	Meters, electric	Group 98
Magnifying glasses	132	Meters, gas	354
Maize (see Corn)		Meters, steam	455
Malleableizing	798	Meters, water	462
Malt	616	Methylated spirit	156
Malt liquors	645	Metronomes	181, 243
Manganese	784	Mica	768
Mantel borders	329	Mica insulators	308
Manufactures, government promotion of	47	Micro-photography	123
Manufactures, statistics of	88	Microscopes	132
MANUFACTURES AND VARIED INDUSTRIES	Department E	Military balloons	546
Manure spreaders	555	Military camp furniture	261
Maps, aeronautic	551	Military defences	197
Maps, cosmographic, geographic, topographic	Group 31	Military engineering	Group 40
Maps showing fruit industry	738	Military foot-wear	436
Maps showing location of minerals	760	Military harness	519
Maps, railway	526	Military hygiene	59
Marble, decorative and ornamental objects in	252, 279	Military ordnance	542
		Military uniforms	426
		Milk, fresh and condensed	592

	CLASS		CLASS
Milk supply for cities and towns	596	Municipal highways	201
Mill board	121	Municipal laboratories	91, 92
Millet	579	Municipal literature	89
Millinery	439	Municipal lodging houses	66, 82
Milling machines	472	Municipal organization	91
Mills, flour	597	Municipal sanitation	200
Mimeograph machines	100	Municipal statistics	89
Mine explosives	747	Municipal water supply	91
Mine maps, models and photographs	779	Mural designs	Group 57
Mine products, handling and transporting	750, 756, 780	Mural paintings	1
Mine rescue work	755	Museums	20, 44
Mine safety appliances	754	Mushrooms	582, 588
Mine sanitation	755	Musical instruments	Group 37
Mine signals and telephones	754	Musical publications	107
Mine surveys	743	Musical scores	108
MINES AND METALLURGY	Dept. L	Music conservatories	22
Mines, drainage of	751	Mustard	633
Mines, inspection and regulation of	63	Mutographs	122
Mines, lighting of	753		
Mines, prevention of accidents	754	N	
Mines, statistics of	800	Nails	291
Mines, working of	Group 152	Natural draft equipment	450
Mineral deposits, illustration of	760	Naturalists portable outfits	260
Mineral deposits, prospecting for	744	Nautical almanacs	115
Mineral fuels and luminants	757	Naval commissary stores and equipment	625
Mineral products, artificial	778	Naval equipment	540, 542
Mineral substances (used for lighting, heating, lubricating) treatment of	776	Naval equipments of medicines and surgical instruments, special	144
Mineral waters	634, 771	Naval footwear	436
Minerals and their uses	Group 153	Naval hygiene	59
Minerals, crushing, washing, separating	763	Naval ordnance	542
Minerals, electric refining of	794, 797	Naval signals	542
Minerals, handling of	757, 759	Naval stores	666
Minerals, non-metallic	768	Naval uniforms	426
Minerals, quarrying	746	Navigation, aerial	Groups 107 to 113
Mineralogy, collections	760	Navigation, aids to	112, 115, 532
Mineralogy, literature and statistics	800	Navigation charts	112, 537
Miniatures, fine arts	2	Navigation, inland	202
Mining camp plans, models, etc.	779	Navigation instruments	128, 521
Mining, coal	748	Navigation, publications and statistics of	115, 537
Mining, government promotion of	47	Navigation, submarine	534
Mining equipment	Group 152	Neckties	441
Mining laws	754	Needles	381, 446
Mining literature and statistics	800	Needlework, implements for	381
Mining of loose materials	759	Needy families, care of	79
Mining operations, illustration of	779	Negro, schools for the	28
Mining methods	746, 748, 759	Neostyle machines	100
Mining, salt, sulphur, etc.	757	Net-making machinery	272
Mining societies	743	Nets, fishing	270
Mirror glass	334	News gathering methods	103
Models, architectural	209	Newspapers	103
Models of vessels and boats	529, 533, 538, 539	Newspapers systems	103
Mohairs	403	Nickel	784, 795
Moisture requirements of fruits	739	Nitrates	770
Mole skins	317	Nitrogen as fertilizer	774
Monel metal	795	Nomination systems	87
Monuments, mortuary	286	Non-alcoholic beverages	634
Mosaic decorations	283	Non-edible agricultural products	Group 132
Mosaics, architectural designs	211	Noodles	617
Mosaics (ceramic products)	325	Noxious plants	649
Mosaics of glass	339	Nursery plants	736
Mother-of-pearl	235, 273	Nursery practice	661
Motive power for vessels	530, 541	Nursing the sick	57
Motorcycles	516	Nut foods	628
Motor vehicles	516, 560	Nuts	714
Motors, electric	479, 480, 481, 483, 491	Nuts, methods of gathering, packing, etc.	700
Motors for balloons and aeroplanes	550	Nuts and bolts	290
Motors for mining	749		
Motors for farms	560	O	
Motors, hydraulic	457	Oats	579
Motors, internal combustion	456, 560	Occupational diseases	58
Motors, miscellaneous	458	Oil burners	450
Motors, railway	524	Oil cloth	315
Moving pictures	122	Oil extractors	451
Moving stairways	214	Oil, fish	622
Mowers (harvesters)	558	Oil, for quieting the sea	535
Muffles, pottery	319	Oil fuel systems	450
Mules (see also Live Stock)	676	Oil heaters	346
Municipal advancement	Group 26	Oil lighting equipment	356, 753
Municipal government	90		

	CLASS
Oil, lubricating	468, 776
Oil mills	568
Oil, mineral (see also Petroleum)	776
Oil, mineral, handling and treatment of	757, 776
Oil, mineral, prospecting for	744
Oil, olive	720
Oil, olive, manufacture of	614
Oil producing plants and products	585, 647
Oil producing seeds	647
Oils, edible animal	591
Oils, essential	165
Oils from wild vegetation	589
Oils from wood	156, 666
Oils, vegetable, non-edible	648
Olives and olive oil	720
Openings for ventilation	350
Open-pit mining	759
Opera glasses	132
Operations, submarine	534
Optical glass	342
Optical instruments	132
Orchard heaters	701
Orchestra equipments	181
Ordnance equipment	542, 786
Ordnance, military and naval	542
Ore beds, working of	Group 152
Ore deposits, illustrations of	760
Ore handling	750, 756, 780
Ore quarrying	746
Ore sampling	745, 780
Ores (see also Mine products)	760, 777
Ores, copper, and their treatment	790
Ores, gold, and their treatment	791, 796
Ores, lead, and their treatment	792
Ores, metallic	777
Ores, preparing for furnaces	780
Ores, silver, and their treatment	791, 796
Ores, smelting of	Group 750
Ores, sorting	185
Organizations, economic	Group 15
Organizations, industrial	47
Organizations, (see also Associations, Societies)	
Ornamental objects	Groups 49, 50 Class 327, 336
Ornamental objects, manufacture of	251
Ornamental trimmings	Group 80
Ornamental work (see Decorations)	
Orthopedic apparatus	141
Ostriches	698
Ovens, bakers'	599
Ovens, electric	129, 148
Overshoes	264, 435
Ownership of land, registry of	573
Oysters, canned	623
P	
Packing, steam	468
Paint brushes	255
Painters' appliances	215
Painting, decorative	282
Painting of buildings	773
Paintings, fine arts	1, 2
Paintings of ships of war	539
Paints and pigments	773, 792, 793
Paints, theatrical make-up	186
Paleontology collections	760
Paleontology literature and statistics	800
Paper, and its manufacture	Group 32
Paper, blank	121, 217
Paper, hand making of	118
Paper hanging	Group 63
Paper, machine making of	119
Paper, made up, various forms of	217
Paper-making machinery	119, 120
Paper pulp, manufacture of	117
Paper, raw materials for	116, 589
Paper, special, making of	120
Paper, (stationery)	217
Paper, various grades of	121

	CLASS
Paper, wall	312
Paper, wall, machinery for printing	310
Paper, wall, special material for	309
Paper, wall, stock for	121
Paper weights	218
Papers, news (see Periodicals)	103
Papier maché	121
Papier maché for buildings	279
Paraffine	154, 775, 776
Parasites, flower and tree (see Insects)	
Parasites, vegetable	656
Parasiticides	170, 725, 732
Parasols	259, 444
Parks and playgrounds	94
Paste, food	617
Paste, food, manufacture of	598
Pastels, fine arts	2
Pasteurizers, dairy	596
Pastry	620
Pastry works	600
Patrol box equipment	189
Patterns for clothing	429
Pauperism	77, 78, 79
Pavement glass	334
Pavilions, metal	302
Paving stone	761
Paving tiles	765
Pea fowls	698
Peanuts, hulling and roasting	607
Pearl fishing	270
Pearl shells	273
Pearls	Group 47
Pearls, imitation	234
Peas	580
Peat	776
Pedometers	126
Pencils	218
Penitentiaries	82
Penology	Group 22
Pens and pen holders	218
Pensions	76, 526
Peonage	82
Pepper	582, 632
Perfumery, flowers and plants for	737
Perfumes	165
Periodicals	103
Periodicals, agricultural	578
Periodicals (see also Publications)	
Petroleum and products (see also Oil, mineral)	154, 468, 757, 776
Petroleum heaters	346
Pet stock	Group 142
Pharmaceutical arts	Group 36
Pharmaceutical materials	159, 589
Pharmaceutical products and their manufacture	159
Pharmacists equipment	147
Pheasants	698
Philosophic apparatus	Group 34
Phonographs	180
Phosphates as fertilizer	774
Phosphorus	163
Photocolorgraphy	123
Photographic apparatus, astronomical	127
Photographic equipment	Group 35
Photographic glass	333
Photographic paper	121
Photographs, architectural	209, 210
Photographs, astronomical	127
Photography	Group 33
Photogravures	123
Photolithography	123
Photo-mechanical printing	96, 123
Photometric appliances	130
Physical laboratory apparatus	125
Physical measuring instruments	125
Physical resources and characteristics	47
Physical training	Group 13
Pianos	177
Pickled fruits	718
Pickles	633

	CLASS		CLASS
Pickling works	608	Population, rural	574
Piers for vessels	203	Population, statistics of	49
Pigeons and their lofts	697	Porcelain insulators	308
Pig iron (see Iron)		Porcelain lined ware	295
Pigments	186, 219, 773	Porcelains	246, 320
Pig sties	553	Pork products	621
Pile drivers and sinkers	195, 202	Portable houses	261, 302
Piling	195	Portable power machines for farm use	560
Pins	446	Portable power tools	472
Pioneers' portable outfits	260	Portieres	425
Pipe, cast iron	789	Post graduate instruction	36
Pipe, earthenware	554, 765	Potato diggers	558
Pipe, gas main	354	Potatoes	581
Pipe, hot air	346	Pottery for buildings	284, 765
Pipe, lead	787, 792	Pottery for fireplaces	351
Pipe lines (oil)	757	Pottery, ornamental	246
Pipe machines	472	Pottery (see also Ceramics)	
Pipe, manufacture of welded and seamless	787	Poultry	570, 695
Piping, steam	453	Poultry foods	570, 699
Piping, water	462	Poultry houses	553, 699
Pipes (smokers')	257	Poultry raising	570, 699
Placer mining	759	Poultry, refrigerated	591
Planing machines, metal	470, 472	Poultry shipping	570
Planing machines, wood	476	Poultry shows, standards, etc.	699
Planing mill products	665	Powder (explosives)	265, 542
Plans of buildings	212	Powders, baking	619
Plans of cities	93	Power shears and punches	470
Plans of engineering works	208	Power tools	Group 90
Plans, working, for building trades	215	Power tools, portable	472
Plant diseases	Group 133, Class 725, 732	Power transmitting appliances	461
Plant spraying devices	659, 700	Precious stones	6, 769, Group 47
Plants, artificial	733	Precious stones, imitation	234, 340, 769
Plants, botanical specimens	728	Preparation of foods, equipment and methods	Group 123
Plants, bulbous	728	Prepared cereals	615
Plants, conservatory	729	Preserved fish, meat and vegetables, Group	126
Plants, flowering	728	Preserved fruits	Group 147
Plants, herbaceous	728	Preserving of fish, meat and vegetables, equipment and methods	602
Plants, hot-house	729	Presses, cheese	596
Plants, medicinal (see Medicinal plants)		Presses, extruding	470
Plants, miscellaneous and products	584	Presses, for chemical or pharmaceutical use	148
Plants, seeds of, Group 120, Class 563, 660, 734		Presses, forcing	472
Plants, oil producing	585, 589, 647	Presses, for shaping metals	473
Plants, special	730	Presses, hydraulic forging	470, 783
Plants, sugar producing	583	Presses, olive oil	614
Plants, wild, for various uses	589	Presses, swaging	470
Plaques, fine arts	6	Pressure regulators, gas	354
Plaster decorations for buildings	279	Pressure regulators, heating system	349
Plaster models, fine arts	5	Pressure regulators, steam	453
Plaster, ornamental objects in	252, 279	Primary batteries	512
Plaster, production of	764	Printers' ink	165
Plastering	215	Printing, equipment, processes and products	Group 29
Plated hardware	305	Printing offices, devices and methods for	103
Plated tableware	229	Printing presses	Group 29
Plate glass (see Glass)		Printing, textile	Group 74
Plate, tin	798	Prisoners, relief of and methods of reforming	85
Plates, enameled	294	Prison labor	82
Plates, metal, variously shaped	293, 786, 788, 792, 798	Products of fishing	Group 55
Plates, steel and iron	785, 786	Products of hunting	Group 54
Platforms, movable	525	Products of useful insects	Group 133
Plating, chemical and mechanical	793	Profit sharing	65, 67, 69
Plating, electro	796	Propelling machinery for boats and ships	530, 541
Platinum	795, 796	Property, protection of	91
Player pianos	177	Prosthesis, apparatus for	141
Plows, agricultural	555	Protectors, electric	Group 99
Plows, snow	520	Provident institutions	Group 21
Plumbago	768	Public health	56
Plumbers' implements	288, 330	Public highways, models and plans of	201
Plumbing goods and fittings	330	Public recreation	94
Plush, silk	416	Public safety	91
Pneumatic apparatus for caissons and foundations	195	Public service commissions	88
Pneumatic tubes	196	Public utilities	Group 25
Police administration	86	Public works, publications and records of	208
Police signal systems and equipment	189	Publications (see also Periodicals)	Group 30
Polishing machines for metals	472	Publications, educational	38
Political organizations	87	Publications for the blind	30
Pomology	Group 146	Publications, railway	522, 526
Pomology, appliances and methods of	Group 144	Pulleys	461
Ponies	674		
Poor, (see Charities)			

	CLASS	CLASS	
Pulleys, differential	459	Religious emblems	229
Pulp for paper	116, 589	Relishes	633
Pulsometers	462	Remuneration, industrial	65, 67
Pumice stones	766	Repoussé work	251
Pumping stations	202	Reproductions of art objects (see also Or-	
Pumps	451, 462, 470, 530, 554, 559, 751	namental objects)	252
Pumps, condenser	454	Rescue work in mines	755
Pumps, feed	451, 462, 530	Reservoirs, water	202
Pumps, hydraulic	470, 783	Resins	590, 666
Punching machines	470	Resources, economic	Group 15
Purifiers, feed-water	451	Retirement provisions	76
Pyrites, use and products	772	Retorts	782
Pyrography	219	Ribbons	391, 407, 417
Pyrometers	349, 455, 781	Rice	579
Pyrotechnics	171, 542	Rice flour	615
	Q	Riding suits	426, 428
Quarantine of fruit trees	742	Ripening seasons of fruits	739
Quarries, drainage of	751	River improvement	202
Quarries, working of	746, 758	Riveting machines	470, 472, 475
Quarrying, literature and statistics of	800	Road maintenance	194, 201
Quartz	765	Road making machinery	194
Quartz, fused, products	336	Road, models and plans	201
	R	Roasting of ores	780
Rabbits	694	Rock, asphaltic	775
Races of the Pacific Area	802	Rock, crushing and handling equipment	763
Radiators	347	Rock, lime or cement producing	764
Rails, steel	786	Rock quarrying	746, 758
Railway cars	521	Roller conveyors	460, 756, 780
Railway construction	193, 520	Rolls for shaping steel	783
Railway equipment	521	Roof decorations	281
Railway history	526	Roofing tile (see Tiling)	
Railway material	520	Root crops	581
Railway motors	481, 524	Roots used for various purposes	159, 589
Railway organization	526	Rope fiber (see Cordage)	
Railway publications	522, 523, 526	Rope-making machinery	362
Railway shops	521	Rope, wire	291
Railway signals	520, 523	Rubber	264, 590
Railway structures	520	Rubber insulators	308
Railway supplies	520	Rubber, manufacture of products	263
Railway traffic	522	Rubber, products of	264
Railway transportation	523	Rubber, substitutes for	264
Railways	Group 103	Rubber toys	275
Railways, elevated	207, 524	Rum	644
Railways for mines	756	Rural population	574
Railways, gravity and scenic	525	Rye	579
Railways, operating of	523		S
Railways, plans and profiles of	207	Saddlery	519
Railways, ship	202, 525	Safes and safety vaults	299
Railways, street	524	Safety devices (see Appliances, safety)	
Raisins	716	Sago	616
Raisins, production of	708	Salt, mining of	757
Range finders	532	Salt, table	161, 631, 770
Ranges, cooking	348	Salts and their production	161, 770
Rare metals, working of	796	Salted meats	621
Razors	224	Salvage equipment, marine	535
Reapers and threshers	558	Sand, handling of	759
Reclaiming of marshes	554	Sand, moulding	767
Recording instruments for tests	125, 129, 455, 506	Sanitary goods and equipment	330
Recording of land tenures	573	Sanitation of cities	200
Recreation, public	94	Sanitation of mines	755
Refineries, sugar	604	Sanitation, plans for	200, 343
Refining of metals	783, 785, 790, 791, 792, 793, 794, 797	Sauces	633
Refining of steel	783	Saving of life	57, 523, 535
Reform associations	45	Saw mills and their equipment	664, 665
Reformatories	83	Saw mill products	665
Refractory materials	326, 351, 767, 782	Saws, hand	297
Refrigerated meats	591	Saws, power	472, 476
Refrigerating apparatus for ship use	531	Scale-removing compounds and appliances	451
Refrigerating machines	467, 601	Scales for farm weighing	559
Refrigerators	601	Scales for laboratory use	125
Regulation of drug, liquor, and tobacco trade	62	Scales for mine weighing	756, 780
Regulation of factories, mines and work	63	Scales for railway use	523
Regulators, electric potential	488	Scales for weighing (used in various coun-	
Regulators, feed water	451	tries)	133
Regulators, speed	449, 452	School appliances	39
Regulators used in heating and ventilating	349	School books and publications	38
		School buildings as social centers	94
		School furniture	39
		School games	40
		School work, exhibits of	42

	CLASS		CLASS
Schools, agricultural	576	Ship building equipment	528
Schools, art	21	Ship building material	527
Schools, business and commercial	13, 25	Ship equipment	531
Schools, continuation	11	Ship railways	202, 525
Schools, correspondence	36	Ships, models of	529, 538, 539
Schools, elementary	Group 5	Ships of war	Group 106
Schools, engineering	17	Shoe machinery	434
Schools, evening	11	Shoes	264, 431, 435
Schools for the blind	30	Shoes for animals	289
Schools for cripples	33	Shoes, theatrical	186
Schools for the deaf and dumb	31	Shot	792
Schools for defectives and delinquents	29, 83	Shrubs, ornamental	727, 730
Schools for the feeble-minded	32	Shutters, metal	303
Schools for the Indian	27	Sick, cape of	57
Schools for the Negro	28	Sickles (reapers)	558
Schools, high	13	Side arms	227
Schools, industrial	26	Sights, telescopic	542
Schools, management, methods and results	6, 7	Sign mechanism	510
Schools, manual training	13	Signs	282, 520
Schools, music	22	Signal apparatus, electric	189
Schools, open air	34	Signal apparatus, railway	520, 523
Schools, professional	18	Signal apparatus for warships	540, 542
Schools, scientific	17	Signal systems for vessels	531
Schools, special training	11	Signals, (explosive)	171, 531, 532, 542
Schools, summer, vacation	11, 35	Signals for mines	754
Schools, technical	17	Signals for use in houses	214
Schools, trade	26	Silica	765
Schools, vocational	12	Silk and silk fabrics	Group 79
Scientific expedition outfits	260	Silk, artificial	414
Scientific expeditions	37	Silk worms	657, 658
Scientific instruments and apparatus		Silk worm culture	658
Groups 34, 35, 36 Classes 455, 506, 544, 546		Silks, appliances for finishing	372
Scientific investigations	37	Silos	553
Scientific societies	37	Silver foil	304
Scientific use of photography	123	Silvered glass	334
Scissors	223	Silver, German	795
Scouring processes for clothing	375	Silver, metallurgy and product	790, 791, 792, 796
Screens, cloth	425	Silversmiths' cutlery	226
Screens, hand	447	Silversmiths' equipment and tools	228
Screens, metal	303, 788	Silversmiths' ware	Group 46
Screw cutting machines	473	Skiffs	533
Screws	290	Skins, for clothing	430
Sculptors' instruments	219	Skins, machines for cutting	382
Sculpture	Group 3	Skins, raw	268
Seaports, improvements of	203	Skins, small articles of	256
Search lights	532, 540	Skins (see also Furs)	
Seats, lawn	702	Slabs, steel	783
Sea walls	206	Slag, handling and use of	781
Seed drills and seeders	556	Slate (see Building stone)	
Seeds, agricultural and horticultural		Slaters' tools and implements	288, 762
Group 120, Class 734		Sleighs	313
Seeds, botanical specimens	660	Slimes in metallurgy	780, 791
Separators, dairy	596	Slippers	435
Separators, oil	451	Slotting machines	472
Separators, steam	453	Smelting, electric	783
Serges	403	Smelting furnaces, iron	781
Serum	159	Smelting of copper	790
Sewage as fertilizer	562	Smelting of lead	792
Sewage connections	330	Smokers' articles	257
Sewage disposal	59, 91, 93, 200	Smoke stacks	450
Sewer pipe (earthenware)	765	Soaps, manufacture of	150
Sewing machines	383, 384, 434	Social conditions, investigation and study	
Sextants	128	of	Group 14
Shades, lamp	296, 358	SOCIAL ECONOMY	Dept. C
Shades, window	317	Social economy, instruction in	45
Shaft couplings and shafting	461	Social reform association, etc.	44
Shaping machines	470, 472	Social work	80
Shawls	406, 418	Societies, agricultural	576
Shawl straps	259	Societies, agricultural co-operative	72
Shears, hand and power	470	Societies, church	44
Sheep (see also Live Stock)	Group 138	Societies, co-operative building	71
Sheep folds	553	Societies, co-operative distributing	69
Sheep shearing machines	559	Societies, engineering	208
Sheet iron and sheet steel	785, 786	Societies, horticultural	740
Sheet metals	788, 790, 792, 793, 798	Societies, humane	44, 535
Sheet metals, remanufactured products of	296	Societies, mining	743
Sheet metal shaping tools	470, 473, 475	Societies, prisoners' aid	85
Sherardizing	798	Societies, scientific	37
Sherbets	606	Societies (see also Associations, Organizations)	
Shingles	665		
Ship biscuit	599, 619		

CLASS	CLASS		
Soda fountains and apparatus	634	Stone, quarrying of	746, 758
Sodium	794	Stone ware	324
Soil, agricultural study of	572	Stones and their uses	761
Soldering processes and equipment.	471	Storage batteries	511
Sorghum	583	Storage of oil or gas	776
Sounding machines	128, 531	Stoves, cooking	348
Soups and soup tablets	621	Stoves, earthenware	351
Spades and shovels	555, 700	Stoves, gas	346, 355
Special appliances for use in houses and buildings	214	Stoves, heating	346
Special machinery unclassified	469, 477	Stoves, hot air	346
Spectacles	132	Stoves, utensils for	348, 349
Speed regulators	449, 452, 530	Straw plaiting machinery	387
Spelter	793	Street lighting	91
Spices	632	Street maintenance	194, 201
Spinning machinery and parts.	359, 360	Street railway equipment	524
Spinning of textile materials	359	Streets, models and plans of	201
Spirits, distilled	Group 130	Stringed instruments	Group 37
Splining machines	472	Strings for musical instruments	181
Split wood products	306	Structural materials	293, 761, 765, 786
Sponges	273	Structural materials, preparation of	761, 762, 765, 786
Sporting goods	267	Structural materials, testing of	191
Spraying apparatus for plants	700	Stump pullers	555
Springs, metal	237, 291	Submarine navigation	534
Stables and stable furniture	553	Submarine work, equipment for	195, 535
Stair railings	300	Subways	207, 524
Stairways	213, 214	Sugar	583, 626
Stalk cutters and rakes	555	Sugar plants and their products.	583
Standards, photometric	130	Sugar refineries	604
Starch factories	597	Suit cases	259
Starches	615, 616	Suits, athletic, gymnastic, hunting and riding	426, 428
Starters, electric	489	Sulphur and its derivatives	162, 772
State laws, uniform	86	Sulphur, mining of	757, 772
Stationery	Group 44	Superheaters, steam	450
Stationery, stock papers for	121	Supplies (see Apparatus, Appliances, Equipment, Implements, Instruments, Machinery, Tools)	
Statistical tables	115	Surface grinding machines	473
Statistics, maritime	537	Surgery	Group 35
Statistics, municipal	89	Surgery, electrical appliances for.	139
Statistics of agriculture	47, Group 119	Surgery, veterinary	146
Statistics of commerce, manufactures and mines	47	Surgical instruments	138
Statistics, vital	52	Surveyor's instruments	126
Statuettes	252, 327	Surveyors' tables	115
Steam cookers	348	Surveys, geologic, equipment and methods	743
Steam fittings	453	Surveys, mine	743
Steam hammers	470	Swaging presses	470
Steam heating systems.	343, 344, 346, 347	Swans	696
Steam hose	453	Sweepers, carpet	285
Steam meters	349, 455	Swimming equipment	536
Steam piping and systems	344, 453	Swine (see also Live Stock).	Group 140
Steam separators and traps	453	Switch-boards, electric	507
Steam shovels (see Excavating machinery)		Switches, electric	509, 510
Steam supplies	453, 468	Synchronous electric apparatus	Group 92, Class 479
Steam thermometers	455	Syrups	583, 626
Steel, alloys (special steels)	784	Syrups, alcoholic	641
Steel, Bessemer, crucible, open hearth.	783		
Steel, commercial forms of	786	T	
Steel, direct manufacture of	783	Table glassware	335
Steel, electrically refined	783	Tables, billiard	285
Steel, equipment and materials for making	783	Tachometers	455, 545
Steel rails	786	Tackles	531
Steel, structural	786	Tacks	291
Steel (see also Iron)		Tailoring equipment	385, 386
Steering apparatus	531	Talking machines	180
Stereopticons	122	Tan bark and extracts	589, 649, 666
Stereotyping	97	Tanks, feed	451
Sterilizing apparatus, surgical	136	Tanks, storage, for oil or gas	757
Stitching machines	383	Tanks, windmill	559
Stock foods	561	Tanning materials	165
Stock, live (see Live Stock)		Tapestries	250, 312, 315, 317
Stock yards	523	Tapioca	616
Stokers, mechanical	450	Tar	156
Stone, artificial, and its production.	764	Taxidermists' work	268
Stone, building	761	Tea	584, 629
Stone, building, prospecting for	744	Telegraph apparatus and instruments.	188
Stone, crushing and cleaning	763	Telegraph lines, railway	520
Stone cutters' implements	288, 762	Telephones and their equipment.	188
Stone cutting	762	Telephones for forestry	662
Stone decorations for buildings.	279		
Stone, ornamental objects of	252		
Stone, paving	761		





14 DAY USE
RETURN TO DESK FROM WHICH BORROWED
LOAN DEPT.

This book is due on the last date stamped below, or
on the date to which renewed.

Renewed books are subject to immediate recall.

16 Oct '58 PY

IN STACKS

OCT 2 1958
REC'D LD

JAN 9 1959

LD 21A-50m-9,'58
(6889s10)476B

General Library
University of California
Berkeley

T876

D18A

341269

San Francisco

UNIVERSITY OF CALIFORNIA LIBRARY

